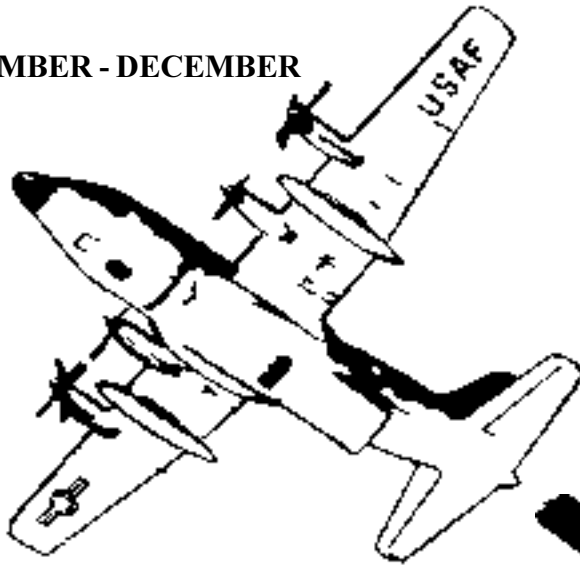


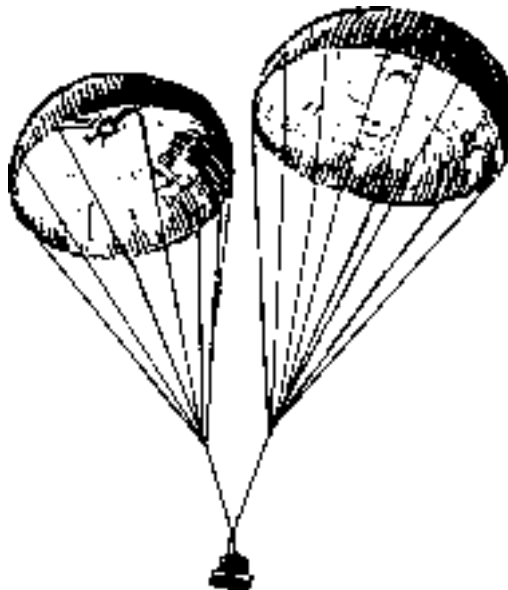
SEPTEMBER - DECEMBER

VOLUME III 2000



TRIENNIAL

**AIRDROP REVIEW  
AND  
MALFUNCTION/SAFETY  
ANALYSIS**



PREPARED BY  
THE US ARMY QUARTERMASTER SCHOOL  
FORT LEE, VIRGINIA 23801-1502

## AIRBORNE CREED

*I am an Airborne trooper! A paratrooper!*

*I jump by parachute from any plane in flight. I volunteered to do it, knowing well the hazards of my choice.*

*I serve in a mighty Airborne Force—famed for deeds in war—renowned for readiness in peace. It is my pledge to uphold its honor and prestige in all I am—in all I do.*

*I am an elite trooper—a sky trooper—a shock trooper—a spearhead trooper. I blaze the way to far-flung goals—behind, before, above the foe's front line.*

*I know that I may have to fight without support for days on end. Therefore, I keep mind and body always fit to do my part in any airborne task. I am self-reliant and unafraid. I shoot true, and march fast and far. I fight hard and excel in every art and artifice of war.*

*I never fail a fellow trooper. I cherish as a sacred trust the lives of men with whom I serve. Leaders have my fullest loyalty, and those I lead never find me lacking.*

*I have pride in the Airborne! I never let it down!*

*In peace, I do not shirk the dullest duty nor protest the toughest training. My weapons and equipment are always combat ready. I am neat of dress—military in courtesy—proper in conduct and behavior.*

*In battle, I fear no foe's ability, nor underestimate his prowess, power and guile. I fight him with all my might and skill—ever alert to evade capture or escape a trap. I never surrender, though I be the last.*

*My goal in peace or war is to succeed in any mission of the day—or die, if needs be, in the try.*

*I belong to a proud and glorious team—the Airborne, the Army, my Country. I am its chosen pride to fight where others may not go—to serve them well until the final victory.*

*I am a trooper of the sky! I am my Nation's best!  
In peace and war I never fail. Anywhere, anytime, in anything—  
I am AIRBORNE!*

## **IN THIS ISSUE**

### **VOLUME III - 2000**

<b>Preface .....</b>	<b>ii</b>
<b>Reports and Analyses .....</b>	<b>iii</b>
<b>Personnel Malfunction Reports and Analyses .....</b>	<b>1</b>
<b>Cargo Malfunction Reports and Analyses .....</b>	<b>93</b>
<b>Aircraft Malfunction Reports and Analyses .....</b>	<b>127</b>
<b>Summary of Supply and Equipment Drops .....</b>	<b>176</b>
<b>Summary of Personnel Parachute Jumps .....</b>	<b>176</b>
<b>Summary of Personnel Parachute Malfunctions .....</b>	<b>177</b>
<b>Injuries Occurring on Parachute Operations as Reported on DA Form 285 .....</b>	<b>177</b>
<b>Aircraft Malfunctions .....</b>	<b>178</b>
<b>Hot Poop .....</b>	<b>179</b>

**PREFACE**

**The Airdrop Review and Malfunction/Safety Analysis is published by the US Army Quartermaster School in hopes that by “passing the word” the malfunction rate within the Armed Forces may be minimized. The review and analysis in this issue covers the period 1 September 2000 - 31 December 2000.**

**POC AND MAILING ADDRESS**

**The POC for Airdrop Malfunction Reports, Monthly Airdrop Summary Reports, and any other information concerning the Airdrop Review and Malfunction/Safety Analysis is Mr. Roger Hale. All correspondence for the above reports and analysis should be addressed to:**

**AERIAL DELIVERY AND FIELD SERVICES DEPARTMENT  
ATTN MR ROGER HALE  
USA QUARTERMASTER CENTER AND SCHOOL  
1010 SHOP ROAD  
FORT LEE VA 23801-1502**

## REPORTS AND ANALYSES

The Malfunction/Safety Review Board met at Fort Lee, Virginia on 21 - 22 February 2001. A breakdown of the areas in which malfunctions occurred from 1 September through 31 December 2000 follows:

<u>CATEGORY</u>	<u>QUANTITY</u>
Containers/CRRC	7
Platforms	
LVAD	9
Personnel	45
Aircraft	24

All DD Forms 1748-2 (Airdrop Malfunction Report (Personnel-Cargo)) are reviewed, and any identifying information is removed. Block 24 is annotated to include both Army and Air Force references if only one is given. No grammatical editing is done to the reports.

**PERSONNEL MALFUNCTION REPORTS AND ANALYSES**

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER #
			C-130	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. GEE ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)
10,735 AGL	125	2265 MS	4	Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT
		MC-5 Static line slick		3
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO JUMPS			
MC-5	SEMI-VERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)
	PILOT CHUTE	WELDON SECTION	BACK IN SUSPENSION	
			STOW LINE	
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON "NO" explanation (How?)		22. RESULTING INJURY	
MC-5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		None	

**31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)**  
 While conducting his third jump with the MC-5 static line deployed ram air parachute system, the jumper flipped back through risers causing the right set of risers to become wedged under the reserve pack tray of the container and reserve protector flap and reserve protector flap pack stiffener. Up to that point the jumper had seven low level static line jumps, five from basic airborne school and two during the conduct of this MC-5 transition training package. The jumper had a weak exit, and exited the ramp at an angle with his legs straight and pointed down causing him to spin and flip upside down through the risers. Upon uneven canopy deployment, the jumper went into an immediate right hand turn and the jumpers right arm was pinned beneath the right riser. Jumper released quick release in waist band giving him additional mobility with right arm. Jumper unstowed left brake causing more rapid right hand turn. Jumper could not reach the cutaway handle with his left hand. Jumper was momentarily hung up on right risers following cutaway causing a left side attitude until right side risers became un-fouled from beneath the reserve protector flap. Reserve then deployed normally.

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**  
 Weak body position upon exit. Jumper exited aircraft at an angle and with his head down and legs straight so that the relative (oncoming) wind first hit the back of the jumpers heels and calves causing him to flip up and through the risers at a side angle. As the risers and canopy deployed, the risers slid up the side and back of the jumper wedging themselves under the reserve pack tray, then sliding up under the reserve pack stiffener, becoming caught.

CONTINUED ON NEXT PAGE

**ANALYSIS: 1**

**WHAT WAS THE MALFUNCTION?**

Right risers caught under reserve.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Weak body position upon exit.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Centralized training team (MTT) that standardizes exact performance of procedures.



I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO
			C-130	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)
1250 Feet	130 KIAS	240	6 Knots	Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP
		LBV		4p, 2s, 2j
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO JUMPS			
MC1-1C	SEMI INVERSION	INVERSION	CHUTE ROLL	6
	PILOT CHUTE	WILLOW SECTION	BAG IN SUSPENSION	
20. TYPE OF RESERVE		21. RESULTING INJURY		
T-10R		Sprained Ankle		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

SNM sprained his left ankle on execution of his PLF. SNM was examined at hospital for a sprained ankle and released.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Probable cause of sprain is an improper PLF. SNM landed with his feet apart.

CONTINUED ON NEXT PAGE

**ANALYSIS: 2**

**WHAT WAS THE MALFUNCTION?**

Incident - sprained left ankle.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper landing - feet apart.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce training standards.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO								
			C-130									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)								
1250	125	1500	5/10	Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP								
		Day, Nontactical, No Combat Equipment. LBVs were worn		1st Pass/8th								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CHUTE ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BACK IN SUSPENSION LINE</td> <td>Improper PLF</td> </tr> </table>				SEMI INVERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION LINE	Improper PLF
	SEMI INVERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION LINE	Improper PLF									
19. NO. JUMPS												
MC1-1C	30											
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain item 31)		22. RESULTING INJURY									
T-10R	<input type="checkbox"/> YES <input type="checkbox"/> NO		Broken Arm									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

While conducting parachute operations, a sixteen man stick exited a C-130 from a port side door as a practice jump for the upcoming operation. Before landing, jumper tried to steer clear of some tank traps that were on the leading edge of the drop zone. At 1,000 meters away from the PL, and being unable to totally clear the trap, jumper landed on the top berm of one and was not able to do a proper PLF and when landing broke his right upper humerus. Upon landing, jumper summoned his team leader for help. The team leader secured the broken arm with a sling and bandage and took all gear and the jumper to the MEDVAC helo. Jumper was air lifted back to the airfield where he was x-rayed and splinted by flight surgeon.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Jumper's injury was due to an improper parachute landing fall, and was not a result of equipment failure, lack of training or negligence.

CONTINUED ON NEXT PAGE

**ANALYSIS: 3**

**WHAT WAS THE MALFUNCTION?**

Incident - broken bone.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper landing - failed to steer away and perform proper PLF.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce training standards.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT C-130	5. ACFT SER NO								
6. OPERATION EXERCISE		7. LOCATION	8. DATE AND TIME									
9. ALTITUDE (Feet) 10,735 AGL	10. ALT SPEED (Knots) 125	11. GEELEVATION (Feet) 2265 Feet MS	12. SURFACE WINDS (Knots) 4	13. VISIBILITY (Feet/Miles) Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER MC-5 static line slick		16. JUMPER'S POSITION IN ALPT 1								
17. TYPE PARACHUTE (Specify)  MC-5	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WLOWN SECTION</td> <td>BAG IN SUSPENSION LINE</td> <td></td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WLOWN SECTION	BAG IN SUSPENSION LINE	
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WLOWN SECTION	BAG IN SUSPENSION LINE										
19. NO JUMPS 19/5												
20. TYPE OF RESERVE  MC-5	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

While conducting his 5th jump with the MC-5 static line deployed ram air parachute system, jumper exited the ramp of a C-130 travelling at 125 KIAS. The jumper was wearing no equipment. The jumper executed a good step and bend (STAB) body position as reviewed on video. The inner and outer deployment bag seemed to spin excessively for a split second during deployment and after the inner deployment bag left the outer deployment bag. Upon opening shock, the jumper noted twisted risers and took the corrective action and bicycled out of them. The jumper then noted that the slider was then still approximately half way up the suspension lines and that his rate of descent was faster than other jumpers. The jumper took the corrective action for a hung slider but the canopy showed no improvement, the slider was still about half way up the suspension lines. The jumper also stated that the risers were inverted, in that the left front riser and suspension lines appeared to be at the right rear of the canopy. Upon realizing that no improvement in the canopy's performance was possible, the jumper made the decision to cutaway the main parachute at approximately 9,000-10,000 feet AGL. The reserve functioned normally.

CONTINUED ON NEXT PAGE

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

The only explanation for the cause of this malfunction that can be offered is that when the jumper exited the aircraft, the deployment bag came off his back and began the rapid deployment sequence, once the two curved main container locking pins opened the main container, the black outer deployment bag with the green inner deployment bag still inside shot to the inside top of the C-130 ramp clam shell (as normally happens prior to the inner deployment coming out of the outer deployment bag), and during the split second spun or flipped through itself as soon as the inner deployment bag came out of the outer deployment bag while it was in the uneven, turbulent dead airspace immediately behind the aircraft in such a way as to cause the described riser inversion. The subsequent minor malfunctions were due to this initial suspected deployment abnormally. The parachute was not recovered due to the 13 kilometer distance between the release point and the drop zone.

**ANALYSIS: 4****WHAT WAS THE MALFUNCTION?**

Hung slider.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Jumper inexperience with possible tension knot.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce training objectives.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALT	5. ACFT SER NO								
			Sharpe									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)								
10,000 AGL	NA	NA	10-12 Knots	Fair								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALT								
		MC-4 with Ruck		6th								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BRIDLE SUSPENSION LINE</td> <td></td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BRIDLE SUSPENSION LINE	
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BRIDLE SUSPENSION LINE										
19. NO JUMPS												
MC-4												
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		22. RESULTING INJURY									
MC-4	<input type="checkbox"/> YES <input type="checkbox"/> NO		None									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 10,000 feet, the exit was clear and freefall was clean. At 4,000 feet (opening alt), I pulled the main ripcord, cleared over my right shoulder and noticed the pilot parachute had deployed but was hesitating on the pack tray. I cleared a second time and still the pilot parachute hesitated to fully deploy. After the second attempt, I conducted cutaway procedures for a total malfunction. Once the cutaway was complete, jump went as normal. The malfunction NCO stated that he saw six deployed MC-4 canopies. Upon closer observation, he noticed there had been a cutaway. He saw a parachute floating towards the ground, above that parachute he saw a reserve pilot parachute, bridle line and deployment bag, all falling toward the ground. As soon as the jumpers hit the ground, he asked the jumper why he cutaway and he said that he had a pilot parachute hesitation.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The cutaway MC-4 was recovered by the malfunction NCO. The MC-4 was returned to the rigger facility. The MC-4 was given a TRI, nothing found wrong with the canopy. The pilot parachute spiral spring had a coil that was not coiled the same as the rest. I believe that one coil later locked the other coils holding it compressed.

CONTINUED ON NEXT PAGE

**ANALYSIS: 5**

**WHAT WAS THE MALFUNCTION?**

Pilot parachute hesitation.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Possible coil lock in pilot parachute spring.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce packing inspection procedures.



I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-23	5. ACFT SER NO
6. OPERATION EXERCISE		7. LOCATION	8. DATE AND TIME	
9. ALTITUDE (Feet) 10,000 MSL	10. ALT SPEED (Knots) 120 KTS	11. G ELEVATION (Feet) 38 FT MSL	12. SURFACE WINDS (Knots) 10 KTS	13. VISIBILITY (Miles/Meters) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER None		16. JUMPER'S POSITION IN ALP Last jumper in pass of 10.
17. TYPE PARACHUTE (Specify)  MT-1X	18. TYPE MALFUNCTION			
	18a. SEMI INVERSION	18b. INVERSION	18c. CANOPY ROLL	18d. OTHER (Specify)
	18e. PILOT CHUTE	18f. BLOWN SECTION	18g. MAIN SUSPENSION LINE	18h. OTHER (Specify)
			Partial	888 MFF 52 S/L
20. TYPE OF RESERVE  MT1X	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Pilot parachute over nose on main canopy. Right steering line of reserve canopy tangled on jumpers leg during opening sequence of reserve. After reserve canopy fully inflated, steering line was cleared by jumper. Once line cleared, reserve canopy functioned properly.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Cause of main canopy malfunction is unknown. Believe reserve malfunction due to poor body position after cut-away.

CONTINUED ON NEXT PAGE

**ANALYSIS: 6**

**WHAT WAS THE MALFUNCTION?**

Pilot parachute over nose followed by jumper entanglement with reserve.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Poor body position for reserve activation or possible out of sequence activation.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce training.

<b>I. GENERAL</b>					
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER #	
			C-130		
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME	
9. ALTITUDE (feet)	10. ALT SPEED (knots)	11. ELEVATION (feet)	12. SURFACE WINDS (knots)	13. VISIBILITY (nautical miles)	
22,735	125	2265 feet MS	2	Unlimited	
<b>II. PERSONNEL</b>					
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP	
		Large ALICE pack rigged with HSPR, twin 53 portable bailout oxygen system		8 of 9	
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION				19. NO. JUMPS
	SEMI-AUTOMATIC	MANUAL	CHUTE ROLL	OTHER (SPECIFY)	
MC-5	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION LINE	Broken left steering line	FF 60/ SL 20
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON "No" signal (Yes/No)		22. RESULTING INJURY		
MC-5	<input type="checkbox"/> YES <input type="checkbox"/> NO		None		

**31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)**

While conducting a 25,000 feet MSL high altitude high opening (HAHO) jump, the jumper experienced a broken left control line. This malfunction was compounded when the jumper reached for his main ripcord handling following the standard 10 second delay and inadvertently grabbed his low pressure delivery hose on his MBU-12/P oxygen mask and pulled the low pressure delivery hose away from both the hard shell mask AND the quick disconnect from the Airox VIII.

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

The suspected cause of the broken left control line is the hard opening shock upon deployment of the main parachute at approximately 23,500 feet MSL. The control line broke at the point where the toggle thong enters the finger trapped loop. Both "legs" on the finger trapped loop snapped; this is the weakest point in the steering lines. This type of malfunction has been seen on several occasions in the past, and occurs because the steering lines when set at 50 percent brakes during the packing procedure absorb the majority of the opening shock because they are attached to the back of the canopy where the pressurized air is forced to immediately stop upon opening shock, causing a snap of both steering lines due to the pressurizing air's inability to "escape" from the cells. The pressure and friction of the two legs of the finger trapped loop when the steering line toggle thong is set, slamming up against the lower control line guide ring causes

CONTINUED ON NEXT PAGE

**32. CAUSE OF MALFUNCTION/FAILURE (continued)**

causes friction resulting in the gradual breakdown of the steering lines at that point, this can be seen as the steering lines gradually become more blackened where they touch the lower control line guide ring. The problem with the jumper pulling the oxygen mask from his face has occurred on several occasions in the past but has gone largely unreported until stricter guidelines set forth are established requiring that any unusual occurrence during a jump be reported. Regarding this point the jumper states “At that point I realized I wasn’t getting sufficient oxygen and my vision was getting fuzzy (hypoxia). Tracing the O2 hose from the end that plugs into the face mask to the end that goes into the Airox VIII, I brought both ends of the hose up to my face due to my lack of vision and saw that the hose was completely disconnected. I tried to reconnect the hose into the Airox VIII but it was jammed under my rucksack and extensive exposed LBE and was unable to get it loose. Although the gloves are thick they must continue to be worn for protection from cold or risk hypothermia and the inability to operate a weapons system upon landing. Recommend that other gloves with equivalent or better protection be researched and used to avoid this frequently occurring problem for units that conduct jumps from 24,999 feet and higher on a regular basis. This problem could result in DCS, hypoxia, off drop zone landings, mid air entanglements upon unconsciousness or injury upon landing.

**ANALYSIS: 7****WHAT WAS THE MALFUNCTION?**

Broken left control line.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Unstable pull causing uneven load.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Reinforce training where jumper traces cable housing down.
2. Possible relook at gloves with better dexterity level.
3. Use goggles that allow complete field of vision to visually confirm pull.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALT	5. ACFT SER NO
			C-130	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/M-Ft)
22,735	125	2265 ft MS	3	90 % Illum
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALT
		MC-5 SLDRAPs, Large ALICE pack rigged w/ HSPR, twin 53 portable bailout oxygen system		9 of 9
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	18a. SEMI-VERSION	18b. INVERSION	18c. CHUTE ROLL	18d. OTHER (Specify)
MC-5	18e. PILOT CHUTE	18f. BLOWN SECTION	18g. BAG IN SUSPENSION LINE	19. NO. JUMPS 20 SL/ 30 Ram Air
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON "No" explanation (How 3rd)		22. RESULTING INJURY	
MC-5	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

While conducting his sixth MC-5 static line HAHO jump during the transition package (jumper previously transitioned to 25,000), jumper experienced a tension knot in the right steering line. In addition to the MC-5 SLDRAPs, the jumper was wearing a large ALICE pack rigged with HSPR and twin 53 portable bailout oxygen system. No weapon was worn.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Jumper has consistently shown excellent body positions upon exit since his initial transition training to the MC-5 SLDRAPs over one year ago and there is no reason to suspect that this night jump was different. Upon opening shock of the parachute, the jumper began a right turn. The jumper released both brakes and conducted a controllability check and discovered it was necessary to pull the left steering line down to approximately 75 percent brakes in order to continue straight line flight. The jumper stated that in the 90 percent illumination on this night jump he could clearly see that it was the right steering line alone that had a classic tension knot loop in it which was about 6-12 inches long. Jumper decided to cutaway the main parachute at approximately 20,000 feet AGL. The reserve functioned without incident. The cause of this malfunction a loop forming in the steering line upon deployment.

CONTINUED ON NEXT PAGE

**ANALYSIS: 8**

**WHAT WAS THE MALFUNCTION?**

Tension knot right steering line.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper packing with possible line dump.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Enforce proper packing procedures with good line tension and quality assurance supervision.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER NO
			Casa 212	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
12,500 feet AGL	120 KIAS	1875 Feet	7 Knots	Zero (night)
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT
		Helmet, gloves, altimeter, etc.		1st pass/6th in stick of 10
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO JUMPS			
MC-4	SEMI INVERSION	INVERSION	CANOPY ROLL	FF: 295 S/L: 50
	PILOT CHUTE	WING MALFUNCTION	BACK IN SUSPENSION LINE	
MC-4	Line Twists/ Hung Slider			
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		22. RESULTING INJURY	
MC-4	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

“:Had several twists on opening. When this was resolved, I noticed my right end cell was closed. I released brakes and pulled down toggles to clear. It did not work. I then started a violent spin and cutaway. Reserve opened normally.”

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Due to zero visibility (night), malfunction NCO could not see the jumper clearly enough from his viewpoint on the surface to make an accurate assumption for cause of the malfunction. Main parachute was recovered with the brakes unstowed, canopy out of deployment bag, and slider still halfway up toward the stabilizers. The entire parachute system was PIS Jun 95 with no damage or defects found after inspection. Possible cause could be an unstable body position during pull sequence causing the line twists and hung slider to occur.

CONTINUED ON NEXT PAGE

**ANALYSIS: 9**

**WHAT WAS THE MALFUNCTION?**

Line twists - hung slider.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Violation of FM 31-19/AFI 11-411. No personal oxygen system could have contributed to unstable body position.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Follow established procedures. Quality control supervision.



I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO
			Casa 212	
6. OPERATION EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
12,500 AGL	110 Knots	490 Feet MSL	03 Knots	Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP
		FF2/Altimeter/MC-4/02/ Ruck/Weapon		1st Pass/3rd
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO JUMPS			
	SEMI-VERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)
MC-4	PILOT CHUTE	WLOWN SECTION	BACK IN SUSPENSION LINE	
				210
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON "No" explanation (Yes/No)		22. RESULTING INJURY	
MC-4	<input type="checkbox"/> YES <input type="checkbox"/> NO		None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 12,500 feet AGL, jumper continued with jump as planned. Jumper pulled his main ripcord at 4,000 feet AGL. Jumper stated that he had a pilot parachute hesitation and the pilot parachute deployed on the second check, also stated that he had a slow opening with a line over the middle. He stated that he did a controllability check. Jumper stated the parachute was uncontrollable and executed emergency procedures. Jumper was under a good reserve canopy by 2,100 feet AGL. Jumper landed on DZ without incident.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Ater performing a 100 percent inspection on the MC-4 parachute system, no deficiency was found. Jumper failed to perform a proper controllability check. During the on site inspection of the main canopy, the brakes were found to still be properly stowed. Cause of the malfunction was due to not following proper procedures.

CONTINUED ON NEXT PAGE

**ANALYSIS: 10**

**WHAT WAS THE MALFUNCTION?**

Pilot parachute hesitation.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Cutaway based on jumpers belief of system failure.
2. Not following proper procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce training to ensure confidence.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER # MD								
			CH-46									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. GSELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Feet)								
10,000	90 KIAS	370 MSL	6 Knots	Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UIC)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT								
		Military Tandem Passenger without Equipment		4th								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	19. NO. JUMPS											
	FF: 1500 SL: 50/64											
MTVS-421	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CHUTE ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WLOW IN SECTION</td> <td>BAG IN SUSPENSION</td> <td>SIGNAL LINE</td> </tr> </table>				SEMI INVERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)	PILOT CHUTE	WLOW IN SECTION	BAG IN SUSPENSION	SIGNAL LINE
SEMI INVERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)									
PILOT CHUTE	WLOW IN SECTION	BAG IN SUSPENSION	SIGNAL LINE									
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON THIS JUMP (Yes/No)		22. RESULTING INJURY									
MTVS-421R	<input type="checkbox"/> YES <input type="checkbox"/> NO		Ankle									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

First jumper was tandem master and performed three tandem jumps during this parachute operation. Second jumper was the tandem passenger on two of the jumps. Freefall portion of the jumps went according to plan without any problems. On jumper 2's second jump as a passenger, SNM's ankle caught on a tire rut which was overgrown with grass and weeds causing the ankle fracture.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Video shows that while landing on jumpers 1 and 2 second tandem jump of the day, SNM was reaching out with his legs. SNM was instructed on proper landing procedures prior to the operation and had successfully completed one jump as a passenger prior without incident.

CONTINUED ON NEXT PAGE

**ANALYSIS: 11**

**WHAT WAS THE MALFUNCTION?**

Incident - ankle fracture.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper PLF.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce proper training.

I. GENERAL					
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO	
			C-130		
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME	
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)	
7800 AGL	125	230	5	Unrestricted	
II. PERSONNEL					
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP	
		Not Given		1	
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION				19. NO. JUMPS
	SEMI-VENTURIN	INVERSION	CHUTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION LINE	Line Over	
MC-5					8
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON THIS JUMP (Yes or No)		22. RESULTING INJURY		
MC-5	<input type="checkbox"/> YES <input type="checkbox"/> NO		None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The MP is an inexperienced MFF parachutist who had not performed a full equipment HALO jump since jump school. He was current in all emergency procedures and simply needs more jumps to become more skillful.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Mishap parachutist was participating in a full equipment day HALO parachute jump. He exited at 7,800 AGL and after a normal exit, followed by a slow left turn in freefall, experienced a line over malfunction after main deployment. MP executed a cut away procedure at 2,500 AGL. The MP landed uneventfully.

CONTINUED ON NEXT PAGE

**ANALYSIS: 12**

**WHAT WAS THE MALFUNCTION?**

Line over.

CORRECTION TO REPORT - Parachute was MC-4 not MC-5. Number of jumps must be more than 8.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Possible unstable pull or packing procedure problem.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure proper training objectives are met and followed to reinforce training.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO								
			C-130									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)								
13,000 Feet MSL	130 Knots	+2890	5-7	Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP								
		MC-4 Raps		3d 1st Pass								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BACK IN SUSPENSION</td> <td></td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION	
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION										
19. NO JUMPS												
MC-4	500+											
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31.		22. RESULTING INJURY									
MC-4	<input type="checkbox"/> YES <input type="checkbox"/> NO		None									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper stated that after deploying main parachute that some lines from the last locking stow were still caught in the retainer band. The jumper pulled down on his rear risers twice which pulled the lines free. The jumper observed the parachute slowly coming out of the d-bag; after doing an altitude check, seeing he was below 2,500 feet, the jumper looked back at his canopy and saw it still had not started to inflate. Since he was fast approaching the 2,000 feet ceiling for cutaway, the jumper initiated cut-away procedures. The jumper had canopy at approximately 1,700 feet and landed on the DZ without any problems. All the equipment was recovered with no signs of any damage. The parachute was out of the d-bag but the slider was still up.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The cause of this malfunction could have been due to packer error. This parachute packer abides by the manual and is a very experienced MFF MC-4 packer. The jumper followed the proper procedures.

CONTINUED ON NEXT PAGE

**ANALYSIS:** 13

**WHAT WAS THE MALFUNCTION?**

Bag lock/hung slider

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper packing procedures with extended stows that locked bag.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce quality assurance supervision of packers.



I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER #								
			C-17									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. G. ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)								
12,500 AGL	130	Unk	4 Knots	Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP								
		FF2, Alt, Helmet, MC-4		5/6 1st Pass								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CUTAWAY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BAG IN SUSPENSION</td> <td>Unclear bag lock</td> </tr> </table>				SEMI INVERSION	INVERSION	CUTAWAY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BAG IN SUSPENSION	Unclear bag lock
	SEMI INVERSION	INVERSION	CUTAWAY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BAG IN SUSPENSION	Unclear bag lock									
MC-4	40											
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		22. RESULTING INJURY									
MC-4	<input type="checkbox"/> YES <input type="checkbox"/> NO		None									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

A slick Hala training exercise was being conducted. The jumper was the fifth jumper out of the first pass to leave the aircraft. Jumper was observed cutting away his main parachute for a malfunction. When investigating the life support equipment, I found that the fourth locking stow had deployed. The third had two lines left in the stow. The second and first had not deployed. Three lines from locking stow four and three were around locking stow number two.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After reviewing the evidence and statements, there were no deficiencies in the packing procedures or the main parachute. The packing procedures were within the regulations. Cause of malfunction - jumper did not clear his burble. When pulling and no canopy, jumper went into cutaway procedures not giving enough time for the main to inflate. The lines around stow number two were not efficient enough to cause bag lock. Jumper error.

CONTINUED ON NEXT PAGE

**ANALYSIS: 14**

**WHAT WAS THE MALFUNCTION?**

Burble

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Appears that jumper did not clear burble. However, insufficient information to determine possible cause.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure training objectives are met and followed to reinforce training with quality assurance supervision.

I. GENERAL																
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO												
			Sherpa													
6. OPERATION EXERCISE		7. TIME AND LOCATION		8. DATE AND TIME												
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)												
12,500 AGL	105 Knots	0	4 Knots	Unlimited												
II. PERSONNEL																
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP												
		Rucksack 40 lbs, Jumpers weight 240 lbs		7th of 9												
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION															
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BACK HUSPEN</td> <td>Broken Control Line</td> </tr> <tr> <td colspan="3"></td> <td>40</td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BACK HUSPEN	Broken Control Line				40
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)												
PILOT CHUTE	WILLOW SECTION	BACK HUSPEN	Broken Control Line													
			40													
MC-4																
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		22. RESULTING INJURY													
MC-4	<input type="checkbox"/> YES <input type="checkbox"/> NO		None													

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

During a HAHO (open ALT 10,000 AGL) drop both control lines broke during opening sequence. Jumper stated during post opening procedures he observed both broken control lines. Jumper made decision to cutaway main canopy. Reserve canopy deployed properly. Jumper made a safe landing with team.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Main canopy was recovered. A 100 percent TRI was conducted and the only abnormalities found were the two broken control lines. Both control lines broke at the finger-traps. Suspect fair wear and tear of control line resulted in breakage during deployment due to increased opening shock common with HAHO operations.

CONTINUED ON NEXT PAGE

**ANALYSIS: 15**

**WHAT WAS THE MALFUNCTION?**

Both control lines broke.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Suspect fair wear and tear of control line due to increased opening shock associated with HAHO.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Not given.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER #
			C-17	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALT. ALTITUDE (feet)	10. ALT. SPEED (Knots)	11. G. ELEVATION (feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (miles/Meters)
800 feet AGL	150 Knots	387 feet	6 Knots	Not Available
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP
		Ballistic helmet, BDU (hollywood)		pass 3, #39, LD
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	18a. SEMI-MALFUNCTION	18b. MALFUNCTION	18c. CHUTE ROLL	18d. OTHER (Specify)
T-10C Main	19. CHUTE	20. MALFUNCTION	21. BAG IN SUSPENSION LINE	Entanglement
				Unknown
22. TYPE OF RESERVE	23. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		24. RESULTING INJURY	
MIRPS	<input type="checkbox"/> YES <input type="checkbox"/> NO		None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This was not a malfunction. This was an incident. Jumper states that upon exiting the C-17, he had a normal exit. Approximately 100 feet AGL, a fellow jumper became entangled with him. They were unable to free themselves and landed with what they had. No injuries occurred with either jumper. They both executed PLFs. No reserves were activated. Another jumper states that jumper exited from the aircraft. He saw a jumper to his right who quickly descended below him. About 100 feet AGL, jumper became entangled in the risers of the jumper who had descended below him. Jumper states that there was no time to slip away, so they held what they had and executed their PLFs about a half a second apart from each other. The malfunction NCO witnessed this entanglement. Upon completion of this pass (which was also completion of the jump) malfunction NCO went to jumpers and received sworn statements, confirming that there were no injuries and no reserve deployments.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This was an incident, not a malfunction. Cause of entanglement was due to lack of jumper's air awareness. The failure of maintaining awareness of the other jumpers in the air, caused jumper #37 right door to become entangled with jumper #39 left door.

CONTINUED ON NEXT PAGE

**ANALYSIS: 16**

**WHAT WAS THE MALFUNCTION?**

Incident - low altitude entanglement.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper performance of third point of performance.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Keep a sharp lookout during descent third point of performance for sustained airborne training.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER# MD								
			C-130									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)								
800 Feet	130 Knots	312 Feet	3 Knots	Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT								
		Rucksack, LBE, Kevlar		10L, 2nd Pass								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BACK IN SUSPENSION LINE</td> <td>Entanglement</td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION LINE	Entanglement
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION LINE	Entanglement									
19. NO JUMPS												
T-10C	UNK											
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain (Yes/No)		22. RESULTING INJURY									
MIRPS	<input type="checkbox"/> YES <input type="checkbox"/> NO		L Buttocks									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The following statement was taken from jumper #10, 2nd pass, left door. He states when he exited the aircraft he had major twists and could not slip away from the lower jumper. He had become entangled with the lower jumper, but they were able to free themselves only partially because the lower jumper had broken suspension lines which remained tangled with jumper #10. They landed 5 to 7 feet apart. Jumper #10 injured his left buttocks but did not think it was serious. The following statement was taken from the lower jumper. He states he had twists in his suspension lines and was able to bicycle free and gain canopy control when he noticed jumper #10, the higher jumper. Jumper #10 initially bounced off the lower jumper's canopy as the twist came out of the lower jumper's suspension lines. The lower jumper noticed his suspension lines were tangled in the harness of jumper #10. He told jumper #10 to climb down to him but he couldn't. They landed with no serious injuries.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This was an incident, not a malfunction. The entanglement was caused by the simultaneous exit and twists of the suspension lines which resulted in jumper #10's inability to gain canopy control.

CONTINUED ON NEXT PAGE

**ANALYSIS: 17**

**WHAT WAS THE MALFUNCTION?**

High altitude entanglement.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Insufficient information.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Not enough information to determine cause.



I. GENERAL					
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT CH-47	5. ACFT SER NO	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME	
9. ALTITUDE (Feet) 1500 AGL	10. ALT SPEED (Knots) Unknown	11. G ELEVATION (Feet) Unknown	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Miles/Meters) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER Combat equipment weapon, rough terrain		16. JUMPER'S POSITION IN ALPT R4, 1 Pass	
17. TYPE PARACHUTE (Specify)  MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS  12
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	W L CANN SECTION	BACK IN SUSPENSION LINE	Entanglement	
20. TYPE OF RESERVE  MIRPS	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in detail.		22. RESULTING INJURY		
	<input type="checkbox"/> YES <input type="checkbox"/> NO		None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Higher jumper's statement reports a good exit and full deployment of main parachute. Higher jumper then saw lower jumper about 150 feet and 40 feet below him, with both jumpers tracking to a truck on the DZ. Higher jumper observed the lower jumper turning towards him, and turned right to avoid lower jumper with 20M of separation. Lower jumper then turned right to avoid higher jumper but brought them closer together. Higher jumper then spread eagled to bounce off lower jumper's suspension lines but became entangled in suspension lines about 16 inches below the anti-inversion net. Higher jumper then tried to weave his way out of lines but could not, and reports that he saw two good canopies but they were starting to collapse. Higher jumper then activated his MIRPS and it fully deployed with no faults. Higher jumper reports seeing lower jumper activating his MIRPS about two seconds later and both jumpers drifted to the ground softly. Lower jumper's statement reports a good exit with full deployment of main parachute. Upon third point of performance lower jumper did not see anyone in his immediate vicinity, so jumper released toggles to drift so he could determine wind direction. After 3 seconds, jumper executed a 180 degree turn to his left, and upon letting up on toggles jumper still kept lookout for other jumpers. Jumper then felt sharp change in wind direction and pulled right toggle for compensation and the released toggle. Lower jumper then looked up to see higher jumper drifting directly at him and higher jumper screaming at him to turn away. Higher jumper then entered lower jumpers suspension lines just below anti-inversion netting and became entangled. Lower jumper then reports first one canopy then the other stealing air from each other and higher jumper activating his MIRPS, the lower jumper activated his MIRPS. Lower jumper saw DAD and part of canopy deploy then stall with half of canopy still in pack tray, so lower jumper pulled remaining canopy

CONTINUED ON NEXT PAGE

**31. DESCRIPTION OF MALFUNCTION/FAILURE (continued)**

and lines out with right hand. After all lines were out of pack tray, the canopy then fully inflated. Lower jumper states that both main parachutes never deflated. Lower jumper and higher jumper rode four full canopies to the ground without lowering equipment and higher jumper landed 5 feet to lower jumpers front left. Malfunction NCOs statement reports good exits and full deployment of both main parachutes for both higher and lower jumper. Higher jumper then failed to give right of way to lower jumper and passed into lower jumper's suspension lines, becoming entangled. Higher jumper then activated MIRPS and had full deployment with no deficiencies. Lower jumper then activated his MIRPS and had partial deployment due to the fact that both jumpers were already under 3 full canopies (2 MC1-1C and 1 MIRPS). Lower jumper then pulled the remained of his MIRPS canopy and suspension lines from the packtray and his MIRPS inflated fully. Both jumpers then rode 4 full canopies to the ground/trees without injury. The entanglement happened at mid-altitude.

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

This was an incident/entanglement not a malfunction. Higher jumper failed to give lower jumper the right-of-way and entangled in lower jumper's suspension lines.

**ANALYSIS: 18**

**WHAT WAS THE MALFUNCTION?**

Incident.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Failure to perform third point of performance.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reinforce proper procedure during sustained.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER #								
			C-130									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. G. ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/M-Ft)								
10,000 Ft AGL	130 Knots	120 Feet	1-2 Knots	5-10 Miles								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT								
		Rucksack, LBE		1st Pass, 1st of 2 Jumpers								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BACK IN SUSPENSION</td> <td></td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION	
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION										
<table border="1"> <tr> <td>MC-4</td> <td></td> <td></td> <td>Line Over</td> <td>42</td> </tr> </table>				MC-4			Line Over	42				
MC-4			Line Over	42								
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		22. RESULTING INJURY									
MC-4	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		None									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 10,000 feet AGL, the jumper stated he went into an uncontrollable tumble and could not recover at 6,000 feet AGL. The jumper deployed his main canopy while in an uncontrollable tumble. Upon opening, the parachute had a line over and could not be controlled. Around 4,800 feet AGL, SM performed cut away procedures and a good reserve was deployed. Jumper then landed off the DZ. Jumper #2 landed at the PI to help in locating him. The main parachute was not found.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

A 100 percent TRI was conducted on the reserve parachute. It had a tear on the top skin between the A and B lines. No other damage was found. This was due to the recovery of the parachute near a fence. The main was not recovered after a lengthy search of the area. The cause of this malfunction was due to an opening while in an uncontrollable tumble. The tumble was caused by the rucksack shoulder strap breaking while exiting the aircraft. The opening while in this uncontrollable tumble caused the malfunction.

CONTINUED ON NEXT PAGE

**ANALYSIS: 19**

**WHAT WAS THE MALFUNCTION?**

Unstable pull..

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Equipment failure caused an unstable pull.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure soldiers inspect all air items.

I. GENERAL																
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER #												
			C-130													
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME												
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. G. ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Feet)												
800 feet AGL	NA	274 Feet MSL	3 Knots	Clear, 5 Miles												
II. PERSONNEL																
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP												
		Para. Ballistic Helmet, LCE, ALICE pack		1R, 1st Pass												
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION															
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>X</td> <td>WILLOW SECTION</td> <td>X</td> </tr> <tr> <td></td> <td></td> <td>BAG IN SUSPENSION</td> <td></td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	X	WILLOW SECTION	X			BAG IN SUSPENSION	
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)												
PILOT CHUTE	X	WILLOW SECTION	X													
		BAG IN SUSPENSION														
T-10C																
19. NO. JUMPS	12															
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON "No" explanation (Yes/No)		22. RESULTING INJURY													
MIRPS	<input type="checkbox"/> YES <input type="checkbox"/> NO		None													

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The malfunction NCO noticed that as soon as the #1 jumper's canopy fully inflated, the jumper's canopy had a large hole in it. The first jumper exited directly in front of the malfunction NCO. The jumper's rate of descent was significantly faster than his fellow jumpers. At approximately 100 feet AGL, the jumper looked down and activated his MIRPS. The malfunction NCO observed the DAD launch and the MIRPS unobstructed deployment sequence. Right before the jumper landed, the suspension lines and the canopy of the MIRPS were fully extended and separated from all other items of equipment. The canopy was approximately 3/4 of the way inflated. The position of the MIRPS in relation to the jumper was at a 45-degree angle and the main canopy was directly above him. The jumper then landed with no injuries. Given approximately 50 to 75 feet of altitude, the MIRPS would have fully inflated as designed.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After completing a 100 percent TRI of the T-10C parachutes, there is evidence and damage that indicate that this parachute was acted upon by an outside source (i.e. another jumper or another jumper's canopy) The #1 jumper, right door, hesitated in the door causing the entire stick's stagger to be improper. With the damage discovered on the second system, we feel that during deployment, right door #1 jumper's canopy became entangled with a jumper's canopy

CONTINUED ON NEXT PAGE

**32. CAUSE OF MALFUNCTION/FAILURE (continued)**

from the opposite door that was also deploying. The suspension line burns match the pattern of the burns on the jumper #1 canopy. The damage on canopy #1 was caused by the canopy #2 suspension lines interaction. When both canopies fully inflated, they separated. It is possible that during the deployment phase, the second jumper's foot got caught in the anti-inversion net/lower lateral band area. This would explain the black kiwi-like stains. These two situations caused the skirt of the #1 canopy to become constricted. With the air still trying to force its way into the air channel, the violent fluttering of the nylon caused the friction type burns. When the main forcibly deployed, the damage occurred.

**ANALYSIS: 20****WHAT WAS THE MALFUNCTION?**

Blown section and broken suspension lines.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Simultaneous exit. Contact between jumper's parachute and other parachute or jumper.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure exit performed IAW.

<b>I. GENERAL</b>				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-130	5. ACFT SER #
6. OPERATION EXERCISE		7. LOCATION	8. DATE AND TIME	
9. ALTITUDE (Feet) 1,250 AGL	10. ALT SPEED (Knots) 130 Knots	11. G ELEVATION (Feet) 430	12. SURFACE WINDS (Knots) 0-3	13. VISIBILITY (Miles/M-F) 5+
<b>II. PERSONNEL</b>				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER Not Given	16. JUMPER'S POSITION IN ALP 2/2	
17. TYPE PARACHUTE (Specify)  MC1-1C	18. TYPE MALFUNCTION			
	18a. SEMI INVERSION	18b. INVERSION	18c. CANOPY ROLL	18d. OTHER (Specify)
	18e. PILOT CHUTE	18f. BLOWN SECTION	18g. BAKED SUSPENSION LINE	18h. Broken Control Line
19. TYPE OF RESERVE  MIRPS	20. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in detail.		21. RESULTING INJURY	
	<input type="checkbox"/> YES <input type="checkbox"/> NO		None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The parachutist exited aircraft. During the second point of performance, the jumper noticed a broken line dangling with no damage to other suspension lines or canopy. Jumper then reached up and secured his control line toggles and continued into his third point of performance. While attempting to turn left, he proceeded to pull down on the toggle of which there was no resistance. He realized the broken line was the left control line. The parachutist landed without injury or activation of the reserve parachute.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The left control line was improperly adjusted (too short).

CONTINUED ON NEXT PAGE

**ANALYSIS: 21**

**WHAT WAS THE MALFUNCTION?**

Broken control line.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Possibly not properly adjusted - not enough information.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Follow proper pack/PIS procedures.



<b>I. GENERAL</b>												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO								
			Casa 212									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)								
12,500 Feet	110 Knots	1875 Ft MSL	6-8 Knots	Unrestricted								
<b>II. PERSONNEL</b>												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP								
		Sidewinder Camera System		First								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CIRCUITRY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BACK IN SUSPENSION</td> <td></td> </tr> </table>				SEMI INVERSION	INVERSION	CIRCUITRY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION	
	SEMI INVERSION	INVERSION	CIRCUITRY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION										
Javelin, Silhouette 210												
19. TYPE OF RESERVE		20. RESULTING INJURY										
PD 193 R		21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input type="checkbox"/> YES <input type="checkbox"/> NO										

**31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)**

During a student training jump, both the MFF instructor and air-to-air cameraman lost altitude awareness after their assigned student deployed his parachute at the briefed altitude. The MFF instructor and cameraman then performed an unauthorized freefall maneuver and failed to deploy their main parachutes at their prescribed deployment altitudes. This maneuver and delay caused their airtac cypress experts (automatic opening devices) to activate and partially deploy their reserve parachutes. Both jumpers landed under their main parachutes without further incident. Consequently, both instructor and cameraman were released from the MFF COI due to poor judgement.

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

Loss of altitude awareness.

CONTINUED ON NEXT PAGE

**ANALYSIS: 22**

**WHAT WAS THE MALFUNCTION?**

Incident - Two ADDs fired.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Lack of altitude awareness - Failure to maintain awareness.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Follow proper procedures and doctrine.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-17	5. ACFT SER NO
6. OPERATION EXERCISE		7. LOCATION	8. DATE AND TIME	
9. ALTITUDE (Feet) 800 Feet AGL	10. ALT SPEED (Knots) 130 Knots	11. ELEVATION (Feet) 387 Feet	12. SURFACE WINDS (Knots) 2 Knots	13. VISIBILITY (Feet/Miles) Unknown
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER M-1950, w/weapon/Alice Pack/LBE		16. JUMPER'S POSITION IN ALP L25/2nd Pass
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION			
	18a. SEMI-MALFUNCTION		18b. OTHER SPECIFY	
	18c. MALFUNCTION		18d. OTHER SPECIFY	
19. TYPE OF RESERVE  MIRPS		20. RESULTING INJURY  None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the C-17 with his T-10C fully deploying. After checking his main canopy, the jumper noticed that his MIRPS had activated. According to the jumper he did not activate the MIRPS. He believed that the button on his sleeve might have caught the rip cord grip and activated the MIRPS.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This is not a malfunction. This is an accidental reserve activation. Probable cause; the jumpers button on his sleeve caught the rip cord grip on the MIRPS causing it to activate.

CONTINUED ON NEXT PAGE

**ANALYSIS: 23**

**WHAT WAS THE MALFUNCTION?**

Incident - Accidental reserve activation.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Not enough information to determine.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure malfunction NCO properly supplies information on 1748.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO
			CH-47D	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
13,000 Feet	75 KIAS	Unknown	7 Knots	Unknown
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP
		MC-4 HALO Stick, Gentex Helmet		#3 Lift/J #2
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO JUMPS			
MC-4 MFF	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)
	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION LINE	Hung Slider
				MFF: 35
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31.		22. RESULTING INJURY	
MC-4	<input type="checkbox"/> YES <input type="checkbox"/> NO		None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

I witnessed a MFF jumper on the third pass having a long snivel upon activation. The opening process lasted more than 10 seconds. I watched him cutaway his main canopy and activate his reserve parachute. The reserve immediately deployed and the jumper landed without incident. The main canopy and the jumper landed in a cotton field. I noted that both brakes (toggles) were still stowed and the equipment had no apparent damage. The slider was midway down and the suspension lines were tangled due to the cutaway. The FF2 millibar dial setting was at 924 which corresponded to a 2500 feet AGL setting. When interviewed, the jumper (with 34 previous MFF jumps) stated he was in stable free fall from 13,000 feet AGL. At 4,000 feet he pulled the main ripcord and looked up to check his canopy. He stated that he could clearly see his slider, but it was not coming down the suspension lines (hung slider). Thus not allowing the parachute to fully inflate. The jumper stated that he repeatedly pulled down on his rear risers, trying to inflate the canopy. The jumper stated that the slider started to slide down the suspension lines and got stuck again. The end result was the same problem. However, the jumper then noticed the canopy starting to spin and initiated cut away procedures.

CONTINUED ON NEXT PAGE

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

After interviewing the jumper, I concluded that this post opening malfunction occurred because of a hung slider. I estimated after his main canopy deployed at 4000 feet AGL and was cutaway, the jumper was under a fully functioning reserve canopy by 2000 feet AGL. Improper emergency procedures were exercised during the deployment sequence. The jumper pulled down on his risers to try and clear the problem. If the jumper would have unstowed his toggles and properly attempted to resolve the problem by pulling down on the brakes (correct procedure for a hung slider), I believe he could have cleared the slider problem and landed the main canopy without incident. The equipment (with special attention to the slider) was 100 percent technical rigger inspected and was found to be completely serviceable without any damage resulting from this jump.

**ANALYSIS: 24****WHAT WAS THE MALFUNCTION?**

Hung Slider.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Cutaway caused by hung slider.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Follow proper emergency procedures for hung slider.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO
			C-130	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)
12,500 AGL	130 Knots	490 MSL	5 Knots	Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP
		ICRAP/Non-standard		2nd Pass
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO JUMPS			
	SEMI INVERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)
SP-170	PILOT CHUTE	WELCOM SECTION	BAG IN SUSPENSION LINE	Bag Lock
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		22. RESULTING INJURY	
Tempo-210	<input type="checkbox"/> YES <input type="checkbox"/> NO		None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The jumper exited aircraft at 12,500 feet and had a normal free-fall. At 3,000 feet AGL, jumper deployed main. Observing a bag-lock, jumper cut-away. Reserve deployed. Jumper landed safely.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After a 100 percent TRI, I found the bag lock was caused by one stow cinching around the stow next to it. The stows were the proper length.

CONTINUED ON NEXT PAGE

**ANALYSIS: 25**

**WHAT WAS THE MALFUNCTION?**

Bag lock.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Tube stows possibly worn out.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Inspect equipment and follow pack procedures.



I. GENERAL					
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO	
			C-130		
6. OPERATION EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/M-F)	
12,500 Feet AGL	130 Knots	490	5 Knots	30 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP	
		MC-4, MA2-30 altimeter Alice pack, M-16		3	
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION				19. NO. JUMPS
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	WILLOW SECTION	BAG WITH SUSPENSION LINE	uncontrollable canopy	
MC-4 parachute system					10
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in detail		22. RESULTING INJURY		
MC-4	<input type="checkbox"/> YES <input type="checkbox"/> NO		None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 12,500 jumper continued free fall as planned. At 4,000 feet, jumper deployed his main parachute and experienced an uncontrollable spin. After a failed attempt to clear, jumper cut away his main. The reserve deployed normal. Jumper landed safely on the DZ.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After a 100 percent TRI of the parachute system, burns were found on the suspension lines approximately 18 inches from the edge of the canopy. The Navy Stiffener was ripped away from the container. FF2 cable was broken at the knurle nut. Cause was determined to be the suspension stow lines became entangled with the Navy Stiffener causing the spin in the jumpers canopy.

CONTINUED ON NEXT PAGE

**ANALYSIS: 26**

**WHAT WAS THE MALFUNCTION?**

Uncontrollable spin.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Unstable body position on pull.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Pull stable/reinforce training.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO								
			AN-2 Colt									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/M-Ft)								
1500	70 Knots	197	7 Knots	Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP								
		LCE, T-10C, MIRPS		2nd								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CHUTE ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BACK H SUSPENSION LINE</td> <td>Right Rear Riser not sewn</td> </tr> </table>				SEMI INVERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BACK H SUSPENSION LINE	Right Rear Riser not sewn
	SEMI INVERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BACK H SUSPENSION LINE	Right Rear Riser not sewn									
T-10C												
19. NO JUMPS												
30												
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON "No" explanation (Yes/No)		22. RESULTING INJURY									
MIRPS	<input type="checkbox"/> YES <input type="checkbox"/> NO		None									

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited AN-2 colt as second jumper. Jumper stated that right rear riser fell to side. He checked his rate of descent with fellow jumpers and pulled his MIRPS reserve.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon inspection of the parachute, it was found to be placed in service September 2000. This was the first jump on the equipment. The TRI revealed that the right rear was not glued, but NOT SEWN to the L-bar connector link. A QDR is being submitted to NATICK for this parachute.

CONTINUED ON NEXT PAGE

**ANALYSIS: 27**

**WHAT WAS THE MALFUNCTION?**

Riser not sewn.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Failure to properly inspect equipment during PIS.
2. Factory did not catch the defective equipment.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Follow TM for in-servicing and packnig.
2. Be more diligent on QC of manufacturers.

I. GENERAL					
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO	
			C-130		
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME	
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/M-Ft)	
800 Feet AGL	Unknown	312 Feet MSL	3 Knots	Overcast - 5 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP	
		LBE, ALCE, Kevlar, M1950 with M4, weight of ALCE approx. 35		#1 in left door, 1st AC	
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION				19. NO JUMPS
T-10C	SEMI-MALFUNCTION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	UNKNOWN SECTION	BACK IN SUSPENSION LINE		
				Partial	13
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31.		22. RESULTING INJURY		
MIRPS	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper stated he had a proper exit from the lead aircraft and started to perform his points of performance. When reaching his second point of performance (check canopy and gain canopy control) he noticed a tear in the canopy. Attempting to perform procedures for partial malfunction (compare rate of descent with fellow jumpers) he could not determine if he was falling faster or not. Checking the canopy again he observed that the tear was not getting larger and snapped into a tight body position and activated his MIRPS. Upon deploying his MIRPS the pilot parachute went out and up. The canopy started to cover his face and the jumper started to pull the canopy back in and re-deploy the parachute by throwing it down and away in the direction of spin. The reserve started again to up through the main canopy so the jumper pulled it away from his face to observe where he was at and then lowered his equipment to prepare to land. Jumper landed without injury and recovered all of his equipment. The MIRPS failed to get out and away from the jumper to totally inflate.

CONTINUED ON NEXT PAGE

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

Upon opening shock, the main canopy incurred damage to the stated section (partial - section 3, gore 11 tear from diagonal seam to both radial seams, approximately 2 inches wide) and led to the jumper possibly having less lift capabilities than his fellow jumpers. The damage may have been caused by material weakness or degradation over time. By deploying his MIRPS, it was discovered that he still had good lift capability and that was a probable cause for his reserve not to fully inflate.

**ANALYSIS: 28****WHAT WAS THE MALFUNCTION?**

Torn Gore

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Not enough information.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Inspection of equipment during packing process.

I. GENERAL					
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER NO	
			C-130		
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME	
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)	
12,500 Ft AGL	130 KIAS	1893 Feet	4 -6 Knots	Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT	
		Gentex, Goggles, Gloves, Altimeter, 02 Mask, 02 Bottle		14	
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION				19. NO. JUMPS
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	WILLOW SECTION	BAG IN SUSPENSION LINE	Floating ripcord	
MC-4					Unknown
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31.		22. RESULTING INJURY		
MC-4	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		None		

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

On the first jump of the day, I had contact with another jumper upon exit from the C-130. The jump was normal, clearing my airspace at 4500 feet, I waived off at 4,000 feet, and went to pull at 3500 feet. I looked for my ripcord but could not see it. I attempted to locate the cable housing, found it but could not find my ripcord cable. I then decided to initiate cutaway procedures at 3000 feet and was under reserve canopy by 2750 feet. No problems under canopy or upon landing.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Jumper exited aircraft and bumped another jumper on exit. The main ripcord was knocked free of its pocket at this time. Jumper was wearing an 02 mask that impeded his sight to identify the floating ripcord. Jumper had a normal freefall, waived at 4000 feet and initiated his pull at 3500 feet. He located the ripcord housing and attempted to trace it down to the ripcord cable, was unsuccessful and initiated cutaway procedures.

CONTINUED ON NEXT PAGE

**ANALYSIS: 29**

**WHAT WAS THE MALFUNCTION?**

Floating ripcord.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Could not locate after collision.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Jumper followed correct procedures.



# TAR&M/SA VOL III

<b>I. GENERAL</b>												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER # MD								
			C-130									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. G. ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)								
800 Feet AGL	120 Knots	387 MSL	5 -7 Knots	Unlimited								
<b>II. PERSONNEL</b>												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT								
		Kevlar, LBE		#5 1/d 2 pass								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CIRCUITRY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BAG IN SUSPENSION</td> <td></td> </tr> </table>				SEMI INVERSION	INVERSION	CIRCUITRY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BAG IN SUSPENSION	
	SEMI INVERSION	INVERSION	CIRCUITRY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BAG IN SUSPENSION										
19. NO. JUMPS												
T-10C	8											
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON "No" explain in item 31		22. RESULTING INJURY									
MIRPS	<input type="checkbox"/> YES <input type="checkbox"/> NO		Jumper hurt leg									

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This was an incident, not a malfunction. Both jumpers were entangled a few seconds after they exited the aircraft. Both jumpers stayed entangled through their entire descent. Also, both jumpers stayed entangled all the way to the ground and conducted PLFs in the same direction.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The probable cause of this incident was the lack of training and experience on the part of both jumpers.

CONTINUED ON NEXT PAGE

**ANALYSIS:** 30

**WHAT WAS THE MALFUNCTION?**

Entanglement.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Simultaneous exit.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Emphasize exiting procedures.

<b>I. GENERAL</b>					
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-17	5. ACFT SER NO	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME	
9. ALTITUDE (Feet) 800 AGL	10. ALT SPEED (Knots) 120 K	11. G ELEVATION (Feet) 421 Feet	12. SURFACE WINDS (Knots) 13 Knots	13. VISIBILITY (Miles) 3 Miles	
<b>II. PERSONNEL</b>					
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER LBE, Kevlar		16. JUMPER'S POSITION IN ALP #1 on L/D	
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION				19. NO JUMPS  UNK
	SEMI-VERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	WLOWN SECTION	BACK IN SUSPENSION LINE	High Altitude Entanglement	
20. TYPE OF RESERVE  MIRPS	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  Lower Back		

**31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)**

This was not a malfunction. This was a high altitude entanglement. The two jumpers became entangled at a high altitude directly after opening shock. The jumpers then separated and tried to slip away from each other, but instead became entangled again. The jumpers then reported that their parachutes started deflating and inflating causing a leapfrog effect. Then about 20-25 feet above the ground both canopies deflated and both jumpers fell from that height all the way to the ground. One of the MIRPS activated upon impact with the ground.

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

The probable cause of this high altitude entanglement is both jumpers exited the aircraft at approximately the same time becoming entangled with each other.

CONTINUED ON NEXT PAGE

**ANALYSIS: 31**

**WHAT WAS THE MALFUNCTION?**

Entanglement.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Simultaneous exit.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Emphasize exiting procedures for both jumpers and jumpmasters.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER NO
			CH-46D	
6. OPERATION EXERCISE		7. TIME AND LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/M-Ft)
4400 Feet AGL	80 Knots Indicated	5 Feet MSL	7-9 Knots	Overcast 8-10 Miles
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT
		Helmet, MA2-30, Hook knife		Sixth of six
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO JUMPS			
MT-1XS/SL	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)
	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION LINE	Line Twists
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY ON "NO" SIGNAL (Yes/No)		22. RESULTING INJURY	
MT-1S	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper was last in stick and making his first static line ram-air jump from a rotary wing aircraft. After exit and opening shock, jumper noticed line twists and performed corrective actions to successfully remove twists. He then noticed only the outer sides of his canopy were inflated and that drogue parachute and drogue control line were over the nose, routed under the main canopy and was inflated behind the trailing edge of the canopy. He performed a dynamic stall in an attempt to clear the drogue without success. Canopy was unstable and uncontrollable. Cutaway procedures were initiated at approximately 2700 feet AGL. Jumper landed without further incident 10 meters from IP.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Poor body position during exit due to inexperience with the lower forward speed of rotary wing aircraft.

CONTINUED ON NEXT PAGE

**ANALYSIS: 32**

**WHAT WAS THE MALFUNCTION?**

Pilot parachute over the nose.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Unstable exit.
2. Poor body position.
3. Inexperienced jumper.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Standardize training and reenforce proper exit procedures.

I. GENERAL					
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP Casa 212	5. ACFT SER #	
6. OPERATION EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ALT. ALTITUDE (Feet) 3,000 Feet	10. ALT. SPEED (Knots) 130 Knots	11. G ELEVATION (Feet) 490	12. SURFACE WINDS (Knots) 5	13. VISIBILITY (Miles/Hours) 30 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER MFF ICRAPS	16. JUMPER'S POSITION IN ALP 4th		
17. TYPE PARACHUTE (Specify) Falcon 265	18. TYPE MALFUNCTION				19. NO. JUMPS 160
	SEMIAUTOMATIC	MANUAL	CUTAWAY ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	WELCHMAN SECTION	BACK IN SUSPENSION LINE	No Pull	
20. TYPE OF RESERVE Ravin II M	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the aircraft at 3,000 feet AGL for a clear and pull. He could not locate his hand-deploy pilot parachute and performed cutaway procedures. Jumper landed safely on the DZ with his reserve.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Jumper error due to inexperience.

CONTINUED ON NEXT PAGE

**ANALYSIS: 33**

**WHAT WAS THE MALFUNCTION?**

1. Could not locate hand-deploy pilot parachute.
2. Performed cutaway and activated reserve.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Inexperience with low altitude clear and pulls.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reenforce training.



# TAR&M/SA VOL III

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER# MD								
			C-130									
6. OPERATION EXEROSE		7. TIME AND LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)								
800 AGL	120-130 Knots	312 Feet MSL	5 Knots	Clear								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT								
		LBE, Helmet, Alice Pack, M1950		PJ/LJ								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BACK IN SUSPENSION</td> <td></td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION	
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION										
19. NO. JUMPS												
T-10C	100+											
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31.		22. RESULTING INJURY									
MIRPS	<input type="checkbox"/> YES <input type="checkbox"/> NO		Shoulder									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This was an incident not a malfunction. Upon exiting the aircraft, the jumper flipped through his risers twice. This was verified by the jumper filling out a DA Form 2823 (Sworn Statement). While flipping through the risers, the reserve parachute activated. Simultaneously, the jumper wrapped the reserve parachute around his leg to keep the reserve parachute from fully deploying and interfering with the main canopy.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Probable cause was a weak exit.

CONTINUED ON NEXT PAGE

**ANALYSIS: 34**

**WHAT WAS THE MALFUNCTION?**

Jumper flipped through risers inadvertently activating his reserve.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Poor exit.
2. Not familiar with new exit procedures.
3. Equipment too heavy.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Reenforce exit procedures.
2. Ensure jumpers weight no more than 360 lbs.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-212	5. ACFT SER #
6. OPERATION EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ALT. ALTITUDE (Feet) 4,800 AGL	10. ALT. SPEED (Knots) 90 Knots	11. G. ELEVATION (Feet) 10 Feet	12. SURFACE WINDS (Knots) 270@8	13. VISIBILITY (Miles/M-F) 7+
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER None	16. JUMPER'S POSITION IN ALP 5th of 5	
17. TYPE PARACHUTE (Specify)  Sharpshooter (non-standard)	18. TYPE MALFUNCTION			
	18a. SEMI INVERSION	18b. INVERSION	18c. CANOPY ROLL	18d. OTHER (SPECIFY)
	18e. PILOT CHUTE	18f. BLOWN SECTION	18g. BAG IN SUSPENSION LINE	18h. Hung Slider & Tension Knot
				19. NO. JUMPS 6,800
20. TYPE OF RESERVE  Raven III	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the aircraft (poised exit) stable. Deployed his main at approximately 4,500 feet AGL. Upon line stretch, the jumper noticed that the slider did was still up. The jumper was about to reach for the rear risers, when the silder came down. But the canopy's shape was irregular. The front (nose) of the canopy appeared to be bowed in toward the center of the canopy. The jumper then performed his post opening procedures. The jumper tried to clear the malfunction by pulling down on the steering lines, but this did not clear the canopy. The jumper did have directional capability, but after checking his rate of descent, decided to perform the procedure for a partial malfunction. The reserve opened properly, and the jumper landed safely on the DZ without incident.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

An inspection of the main parachute by the jumper, a rigger, and jumpmaster, revealed several severe burns on the slider. It appears the slider was hung up on the suspension lines, but released once it burned through. Unable to determine what caused the nose of the canopy to fold inward.

CONTINUED ON NEXT PAGE

**ANALYSIS: 35**

**WHAT WAS THE MALFUNCTION?**

Hung slider.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper packing procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Follow proper packing procedures IAW manufacturer.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-130	5. ACFT SER NO
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet) 800 Feet AGL	10. ALT SPEED (Knots) 120 Knots	11. G ELEVATION (Feet) 387 MSL	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER Kevlar, LBE		16. JUMPER'S POSITION IN ALP #14 1/d 2 pass
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION			
	18a. SEMI INVERSION		18b. INVERSION	
	18c. PILOT CHUTE		18d. BLOWN SECTION	
		18e. CANOPY ROLL		18f. OTHER (SPECIFY)
		18g. BAG IN SUSPENSION		18h. SIG. LINE
				18i. NO JUMPS 6
20. TYPE OF RESERVE  MIRPS	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This incident was not a malfunction. The malfunction NCO indicated that he saw the reserve activate after the jumper exited the aircraft. In his opinion during the deployment phase of the parachute the shock of the parachute opening may have scared the jumper and the natural reaction was to activate the reserve parachute

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The probable cause of this incident was the inexperience of the jumper.

CONTINUED ON NEXT PAGE

**ANALYSIS: 36**

**WHAT WAS THE MALFUNCTION?**

Inadvertant reserve activation.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Weak exit.
2. Inexperienced jumper.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reenforce exit procedures.

# TAR&M/SA VOL III

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO								
			C-130									
6. OPERATION EXERCISE		7. TIME AND LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Feet)								
800 Feet AGL	120 Knots	387 Feet	8 Knots	5 Miles Clear								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP								
		Kevlar, LBE, M1950, Alice		#151/d								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI-VERSION</td> <td>INVERSION</td> <td>CHUTE ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WLOWN SECTION</td> <td>BACK IN SUSPENSION</td> <td></td> </tr> </table>				SEMI-VERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)	PILOT CHUTE	WLOWN SECTION	BACK IN SUSPENSION	
	SEMI-VERSION	INVERSION	CHUTE ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WLOWN SECTION	BACK IN SUSPENSION										
19. NO JUMPS												
T-10C	15+											
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		22. RESULTING INJURY									
MIRPS	<input type="checkbox"/> YES <input type="checkbox"/> NO		None									

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This was an incident, not a malfunction. According to the jumper's DA Form 2823, he exited the aircraft properly and then went into his second point of performance then noticed that his reserve parachute had deployed and it was wrapped around his body. The jumper stated that he did not know how it deployed.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The probable cause of this incident was the jumper was inexperienced. Moreover, during opening shock the jumper may have inadvertently pulled the reserve ripcord.

CONTINUED ON NEXT PAGE

**ANALYSIS: 37**

**WHAT WAS THE MALFUNCTION?**

Inadvertant reserve activation.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Ripcord grip awareness/control.
2. Ensure proper ripcord is being used with the MIRPS.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reenforce first point of performance.



I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-130	5. ACFT SER# MD
6. OPERATION EXERCISE		7. TIME AND LOCATION	8. DATE AND TIME	
9. ALT. ALTITUDE (Feet) 800 Feet	10. ALT. SPEED (Knots) Unknown	11. GSELEVATION (Feet) 312 feet	12. SURFACE WINDS (Knots) 3-5	13. VISIBILITY (Feet/Miles) Unknown
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER LBE, ruck, M1950	16. JUMPER'S POSITION IN ALP Unknown	
17. TYPE PARACHUTE (Specify)  T-10C	18. TYPE MALFUNCTION			
	18a. SEMI INVERSION	18b. INVERSION	18c. CANOPY ROLL	18d. OTHER (SPECIFY)
	18e. PILOT CHUTE	18f. BLOWN SECTION	18g. MAIN SUSPENSION LINE	19. NO. JUMPS Unknown
20. TYPE OF RESERVE  MIRPS	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After his final clear to the rear, the assistant jumpmaster on the right door returned into the aircraft. He was looking at the safety when he fell to the rear and his reserve activated. The safety recovered the ripcord grip from the floor of the aircraft.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

According to statements made by the assistant jumpmaster and the safety team, the assistant jumpmaster had completely returned inside the aircraft when turbulence caused him to fall towards the rear of the aircraft. Neither the assistant jumpmaster nor the safety know what caused the reserve to activate but we know that it did. At this time it is unknown if the aircrew acknowledges turbulence as a possible cause.

CONTINUED ON NEXT PAGE

**ANALYSIS: 38**

**WHAT WAS THE MALFUNCTION?**

Premature reserve activation of reserve in aircraft.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Ripcord grip awareness.
2. Jumpmaster may not have maintained three points of contact.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Maintain control of ripcord grip.
2. Jumpmaster needs to maintain body control and proper body position.

I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO								
			C-130									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. GEELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/M-Ft)								
12,000 Feet AGL	120 Knots		5-8 Knots	Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP								
		Helmet, Jumpsuit, goggles, gloves, altimeter		8								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI INVERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WILLOW SECTION</td> <td>BRACKET SUSPENSION LINE</td> <td>Broken "A" Lines</td> </tr> </table>				SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WILLOW SECTION	BRACKET SUSPENSION LINE	Broken "A" Lines
	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WILLOW SECTION	BRACKET SUSPENSION LINE	Broken "A" Lines									
PF 235 Lightning												
19. TYPE OF RESERVE	20. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		21. RESULTING INJURY									
PD 193R	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		None									

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

2 Broken "A" lines

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Blunt cuts on cascade to A lines inside finger trap.

CONTINUED ON NEXT PAGE

**ANALYSIS: 39**

**WHAT WAS THE MALFUNCTION?**

2 broken “A” lines.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Blunt cuts on cascade to A lines inside finger trap.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. TRI parachute prior to use.
2. Monitor number of jumps on canopy.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-130	5. ACFT SER #
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALT. ALTITUDE (Feet) 12,000 Ft AGL	10. ALT. SPEED (Knots) 120 Knots	11. G. ELEVATION (Feet) 500 Feet	12. SURFACE WINDS (Knots) 5-8 Knots	13. VISIBILITY (Miles/Meters) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER Helmet, jumpsuit, goggles, gloves, altimeter		16. JUMPER'S POSITION IN ALP 6
17. TYPE PARACHUTE (Specify)  PE 235 Lightning	18. TYPE MALFUNCTION			
	18a. SEMI-RETARDER	18b. INVERSION	18c. CHUTE ROLL	18d. OTHER (SPECIFY)
	18e. PILOT CHUTE	18f. BLOWN SECTION	18g. BOWTIE SUSPENSION LINE	19. NO. JUMPS SL: 25 FF: 204
20. TYPE OF RESERVE  PD 193R	21. RESERVE FUNCTIONED PROPERLY OR NOT? (Yes/No) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY  None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Pilot parachute retraction system entangled preventing deployment of the main parachute.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Improper setting of the kill line.

CONTINUED ON NEXT PAGE

**ANALYSIS: 40**

**WHAT WAS THE MALFUNCTION?**

Pilot parachute retraction system entangled.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper setting of the kill line.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Ensure jumpers are properly trained on equipment they are using.
2. Ensure kill line inspected during JMPL.
3. Need more information.

# TAR&M/SA VOL III

<b>I. GENERAL</b>				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP C-130	5. ACFT SER #
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALT. ALTITUDE (Feet) 12,000 ft AGL	10. ALT. SPEED (Knots) 120 Knots	11. GSE ELEVATION (Feet) 500 Feet	12. SURFACE WINDS (Knots) 5-8 Knots	13. VISIBILITY (Feet/Miles) Unlimited
<b>II. PERSONNEL</b>				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER Helmet, jumpsuit, goggles, gloves, altimeter		16. JUMPER'S POSITION IN ALP 10
17. TYPE PARACHUTE (Specify) PE 235 Lightning	18. TYPE MALFUNCTION			
	18a. SEMI INVERSION	18b. INVERSION	18c. CANOPY ROLL	18d. OTHER (SPECIFY)
	18e. PILOT CHUTE	18f. BLOWN SECTION	18g. BAGGAGE SUSPENSION LINE	19. NO. JUMPS SL: 25 FF: 201
20. TYPE OF RESERVE PD 193R	21. RESERVE FUNCTIONED PROPERLY OR NOT? (No explanation given yet) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Pilot parachute hesitation.	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Pilot parachute worn out. Improper packing.	

CONTINUED ON NEXT PAGE	
------------------------	--

**ANALYSIS: 41**

**WHAT WAS THE MALFUNCTION?**

Pilot parachute hesitation.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Pilot parachute worn out.
2. Improper packing.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. TRI equipment.
2. Ensure jumper is properly trained on the equipment they are using.
3. Need more information.



I. GENERAL												
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP	5. ACFT SER NO								
			C-130									
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME								
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)								
12,500 Feet	130 Knots	490 MSL	3 Knots	Unlimited								
II. PERSONNEL												
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALP								
		Javelin J-7/PD 230		1st/2d Pass								
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION											
	<table border="1"> <tr> <td>SEMI-VERSION</td> <td>INVERSION</td> <td>CANOPY ROLL</td> <td>OTHER (SPECIFY)</td> </tr> <tr> <td>PILOT CHUTE</td> <td>WLOWN SECTION</td> <td>BAG IN SUSPENSION</td> <td></td> </tr> </table>				SEMI-VERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)	PILOT CHUTE	WLOWN SECTION	BAG IN SUSPENSION	
	SEMI-VERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)								
PILOT CHUTE	WLOWN SECTION	BAG IN SUSPENSION										
19. NO. JUMPS												
PD-230	580											
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT (explain in item 31)		22. RESULTING INJURY									
Raven III	<input type="checkbox"/> YES <input type="checkbox"/> NO		None									

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper exited the aircraft at 12,500 feet AGL and continued with his jump as planned. At 3,000 feet AGL, the jumper deployed his main parachute. Jumper checked his main canopy and observed line twist above and below the slider. Jumper made two attempts to clear the line twist. At 2,000 feet AGL, the jumper performed cutaway procedures. The reserve canopy deployed in the prescribed manner. Jumper landed on the drop zone.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After performing a 100 percent inspection of the parachute system, no damage was found. The slider was in the down position with twisted suspension lines above the slider. The cause of the malfunction is unknown.

CONTINUED ON NEXT PAGE

**ANALYSIS: 42**

**WHAT WAS THE MALFUNCTION?**

Twisted suspension lines.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Improper body position during pull.
2. Improper packing procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Ensure parachutes are packed IAW manufacturers recommendations.
2. Ensure jumper pulls stable and on heading.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALPT	5. ACFT SER# MD
			C-17	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALT. ALTITUDE (Feet)	10. ALT. SPEED (Knots)	11. G. ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/M-Vis)
800 AGL	130 Knots	387 Feet	3 Knots	7 Miles
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALPT
		Ballistic helmet, LBV, M1950, Alice		R32/3 pass
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO. JUMPS			
T-10C	SEMI INVERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)
	PILOT CHUTE	WILLOW SECTION	BACK IN SUSPENSION	
			SIGNAL LINE	
				18
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in detail.		22. RESULTING INJURY	
MIRPS	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Upon exiting the aircraft the jumper conducted his first point of performance. At the end of his 4 thousand count, he stated that he did not feel an opening shock. He then checked his main canopy and saw that it had not fully opened. He immediately activated his reserve. After activating his reserve, which did not fully inflate, his main canopy fully opened. At that time the jumper pulled up the MIRPS and did not allow the MIRPS to fully inflate. The jumper then stated that he went into his third, fourth, and fifth point of performance without incident. In addition, after a telephonic interview with the jumper he stated that he was confused after he exited the aircraft and that he was not very "Air Aware" during his first point of performance. Furthermore, after a TRI of the main canopy the following damage was found. The bottom of one square of the anti-inversion net was separated at gore #20. Also a small hole approximately 1/8 inch in diameter was found on gore #22 section #3. Accordingly, there was not enough conclusive evidence that would indicate that the parachute damage had any effect on this situation. Finally, according to the malfunction NCO's sworn statement, he was in position to observe the entire Airborne operation. Moreover, he stated that he did not see anything out of the ordinary or a parachute malfunction.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The probable cause of this situation was the inexperience of the jumper.

CONTINUED ON NEXT PAGE

**ANALYSIS: 43**

**WHAT WAS THE MALFUNCTION?**

Premature activation of the reserve by jumper.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Starting 4 second count too early or counting too fast.
2. Inexperienced jumper.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reenforce training in five points of performance.

I. GENERAL				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALP Casa 212	5. ACFT SER #
6. OPERATION EXERCISE		7. LOCATION	8. DATE AND TIME	
9. ALT. ALTITUDE (feet) 12,500 feet AGL	10. ALT. SPEED (Knots) 130 Knots	11. G. ELEVATION (feet) 490 Feet	12. SURFACE WINDS (Knots) 8 Knots	13. VISIBILITY (Miles) 30 Miles
II. PERSONNEL				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER ICRAP		16. JUMPER'S POSITION IN ALP 2
17. TYPE PARACHUTE (Specify)  F-235	18. TYPE MALFUNCTION			
	19. SEMI INVERSION	20. INVERSION	21. CANOPY ROLL	22. OTHER (Specify)
	23. PILOT CHUTE	24. BLOWN SECTION	25. BAG IN SUSPENSION LINE	26. CLOSED END CELLS LINE TWISTS Closed end cells line twists
27. TYPE OF RESERVE  Raven II-M	28. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in item 31. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		29. RESULTING INJURY  None	

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 12,500 feet, the jumper deployed his main at 3,500 feet. Noticing closed end cells and excessive line twists, the jumper made two attempts to clear and performed cutaway procedures. Jumper landed safely on the drop zone with his reserve canopy.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After 100 percent TRI of the equipment, no damage to the parachute system was found. The jumper was turning during the main parachute deployment phase causing line twists.

CONTINUED ON NEXT PAGE

**ANALYSIS: 44**

**WHAT WAS THE MALFUNCTION?**

Closed cells - line twists.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Jumper not stable or on heading during pull.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure jumper is stable and on heading during pull.

<b>I. GENERAL</b>				
1. UNIT BEING AFFLITED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ALT	5. ACFT SER #
			Unk	
6. OPERATION EXERCISE		7. LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ALT SPEED (Knots)	11. G ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Miles/Meters)
12,500 AGL	Unknown	224 MSL	Calm	Unlimited
<b>II. PERSONNEL</b>				
14. NAME (Last, First, MI, GRADE, SSAN, & UNIT)		15. EQUIPMENT WORN BY JUMPER		16. JUMPER'S POSITION IN ALT
		MC4, front mounted ruck sack, weapon		1 pass/ 2 out
17. TYPE PARACHUTE (Specify)	18. TYPE MALFUNCTION			
	19. NO JUMPS			
	SEMI-VERSION	INVERSION	CANOPY ROLL	OTHER (SPECIFY)
MC4	PILOT CHUTE	W/LOW INJECTION	BACK IN SUSPENSION LINE	Early main canopy activation
				46
20. TYPE OF RESERVE	21. RESERVE FUNCTIONED PROPERLY OR NOT? Explain in detail.		22. RESULTING INJURY	
MC4	<input type="checkbox"/> YES <input type="checkbox"/> NO		None	

**31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)**

MC4 main canopy deployment at 8,000 feet AGL, instead of the 4,000 feet planned activation altitude. 100 percent TRI of air items revealed no damage, however main ripcord was missing. FF2 was serviced prior to jump and this was the first activation since that servicing. FF2 was tested immediately upon its return to the shop and was in 100 percent serviceable condition.

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

The jumper stated that this was his first time jumping that type of aircraft and that he tumbled backwards on exit. As he went over backwards, jumper states that his front mounted ruck came up towards his face. He then attempted to correct his instability and return to the face to earth position. As soon as he was face to earth, he said he felt something dragging behind him. Checking over his right shoulder he saw his main pilot parachute deploying from the pack. When he came under his canopy he checked his altimeter and was at 8,000 feet AGL. He landed safely at the predesignated coordinates approximately 10 minutes later. It is believed that during his tumbling/instability, as his ruck sack came towards his face it knocked his rip cord grip loose from the pocket. As he continued to tumble, the centrifugal force acting on the rip cord grip caused the cable to be withdrawn, activating the main pilot parachute. The rip cord grip was not located.

CONTINUED ON NEXT PAGE

**ANALYSIS: 45**

**WHAT WAS THE MALFUNCTION?**

Premature activation of main canopy.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Unstable exit, tumbling, inexperience.
2. Jumper has experienced problem in the past.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Reenforce training.



**CARGO MALFUNCTION REPORTS AND ANALYSES**

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION (ZFRZ)		7. PLAC AND LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 700 AGL	10. ASLT SPEED (Knots) 140 Knots	11. DEFL ELEVATION (Feet) 200 Feet	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

II. CARGO				
19. TYPE LOAD AND WEIGHT  Training/Plywood 3600 LBS	20. MAGNETIC INSTRUCTIONS (PARACHUTE)  TM 10-500-2/ TO 13C7-1-15	21. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> 21A. DUAL RELEASE	<input type="checkbox"/> 21B. RELEASE GATE	21C. OTHER (Describe)
		21D. PLATON/CLIMB 1	21E. CONTAINERS	
22. TYPE PLATFORM AND DROP CONTAINER  Type V 8 foot	23. TYPE PARACHUTE AND NUMBER  G-11B (1)	24. SITE EXTRACTION/RE-LEASE PARACHUTE  15 Foot Ring Slot	25. LENGTH OF REEFING LINE	26. POSITION OF LOAD IN AIRCRAFT  FS 360
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The extraction sequence and the deployment of the single G-11B were correct. As soon as the M-1 release had tension from the almost fully inflated canopy, the finger attaching the G-11B to the M-1 release prematurely released. Upon inspection of the finger and the main body of the M-1 release there was no visible damage found. Upon disassembly of the M-1 and five test of the timer block, it was found that when the timer was armed the keys would extend but when the arming wire was inserted and the screwdriver was removed the timer would wind down enough for the keys to retract. One out of the five test resulted in the keys not retracting after the screwdriver was removed but could only be accomplished by inserting the arming wire with the bend in the wire facing downward. It could not be determined if the damage to the timer block was a result of the impact. The timer was tested at 16 seconds two days prior to the malfunction. The load was jointly inspected by five personnel</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The timer block was defective. When tested after the malfunction, the timer never fell into the correct time but could be armed with keys extended some of the time. This is why it passed the JAI.</p>				

**ANALYSIS: 46**

**WHAT WAS THE MALFUNCTION?**

Timer failed.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Arming of the M-1 release and training of personnel.
2. Possible screws on face plate not seated properly.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Supervision of rigger personnel.
2. Thorough inspection of the M-1 release.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SERIAL NO
6. OPERATION IZFRIC1		7. PT AND LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 1150 AGL	10. ASFT SPEED (Knots) 150	11. DEFT ELEVATION (Feet) 400 AGL	12. SURFACE WINDS (Knots) 050/6	13. VISIBILITY (Feet/Miles) 7 Miles
II. CARGO				
14. TYPE LOAD AND WEIGHT M198 Howitzer 22980 LBS	15. MAGNETIC INSTRUCTIONS FOR RELEASE FM 10-527/ TO 13C7-10-191	16. AERIAL DELIVERY SYSTEM USED		
		17. DUAL RELEASE NO. PLATFORMS 1	18. RELEASE DATE NO. CONTAINERS	19. OTHER (if any)
20. TYPE PLATFORM AND DROP CONTAINER Type V	21. TYPE PARACHUTE AND NUMBER G-11C (5)	22. SITE EXTRACTION RELEASE PARACHUTE 28 Foot Ring Slot	23. LENGTH OF RIGGING TIME	24. POSITION OF LOAD IN AIRCRAFT FS 541
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>During flight, the safety loop worked its way up and over the bent V ring. Attempted to relocate the safety loop over the bent V ring but was unsuccessful and a no drop was called and the aircraft returned to base. Problems were encountered with the safety loop during the rigging of the extraction parachute but were corrected prior to the JAI. Loadmasters lost training, no flight hours and no aircraft damage.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>None</p>				

**ANALYSIS: 47**

**WHAT WAS THE MALFUNCTION?**

Safety loop was over bent V rings.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Pendulum line not tight enough to prevent loop from getting over the bent V ring.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Recommend fixing the 28-foot d-bag to ensure that the pendulum line is strong enough to ensure that the parachute is tight. Do away with the safety loop.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION IZFRIC1		7. PT AND LOCATION		8. DATE AND TIME
9. ALT ALTITUDE (Feet) 1250 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DFT ELEVATION (Feet) 397 Feet	12. SURFACE WINDS (Knots) 4-7 knots	13. VISIBILITY (Feet/Miles) 7 Miles
III. CARGO				
14. TYPE LOAD AND WEIGHT M198 (155 Howitzer) 22,860 LBS	15. MAGNETIC INSTRUCTIONS/REMARKS FM 10-527/ TO 13C7-10-191	16. AERIAL DELIVERY SYSTEM/USED		
		17. DUAL RELEASE NO. PLATFORMS 1	18. COS RELEASE RATE NO. CONTAINERS	19. OTHER (E-MAIL)
20. TYPE PLATFORM AND DROP CONTAINER Type V	21. TYPE PARACHUTE AND NUMBER G-11C (5)	22. SITE EXTRACTION/RE-LEASE PARACHUTE 28-Foot Extraction	23. LENGTH OF REEFING LINE	24. POSITION OF LOAD IN AIRCRAFT 1 of 1
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Extraction parachute from the load of the M-198 deployed properly. The five G-11Cs deployed and functioned correctly. The load was coming down and landed fine. The load was then lifted off the ground about a half a foot and slid over about six feet. The G-11Cs were still inflated and then started to roll the platform over. On the way over, the G-11Cs were released. The G-11Cs were released in the direction of the wind. The M-198 ended upside down. The M-198 appeared to only sustain cosmetic damage. The platform sustained no damage. There was no major damage on the M-198. Some of the items on the 2404 were M171 level vials do not illuminate. Brakes do not operate properly. M17 does not illuminate. FCAT required.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>M2 did not reach the critical angle in order to release the parachute release connectors that were attached to the five G-11Cs. This caused the G-11Cs to stay inflated after the M-198 landed on the ground. The G-11Cs were released when the load was overturned. The M2 release was tested and found to be in the 14-14.5 second range ten out of ten times. The suspected cause for the M2 release not to disengage the parachute release connectors would be due to high winds keeping constant tension on the release.</p>				

**ANALYSIS: 48**

**WHAT WAS THE MALFUNCTION?**

M-2 release did not release upon impact with the ground.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Due to high winds, the M-2 did not reach the critical point needed for it to release.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Get out of the vehicle when checking winds.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION IZFRIC1		7. PF AND LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 800 Feet	10. ASLT SPEED (Knots) 130 Knots	11. DFT ELEVATION (Feet) 274 Feet	12. SURFACE WINDS (Knots) 6	13. VISIBILITY (Feet/Miles) 5 Miles

II. CARGO				
19. TYPE LOAD AND WEIGHT  M998 x 2 9900/10380 LBS	20. MAGNETIC INSTRUCTIONS FOR NO. 1  FM 10-517 TO 13C7-1-111	21. AERIAL DELIVERY SYSTEM PLACED		
		21a. DUAL MAIL NO. PLATFORMS 2	21b. COS RELEASE DATE NO. CONTAINERS	21c. OTHER (if any)
22. TYPE PLATFORM AND DROP CONTAINER  Type V 16 Foot x 2	23. TYPE PARACHUTE AND NUMBER  G-11B (2)	24. SITE EXTRACTION/RE-LEASE PARACHUTE  2 x 22-Foot	25. LENGTH OF REEFING LINE	26. POSITION OF LOAD IN AIRCRAFT  1 & 2 of 2
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Both loads extracted late and landed. in the trees off the drop zone. Both platforms were found to be on their sides, with the right side to the ground. Both HMMWVs sustained damage. All air equipment appeared to be in full functional order. The G-11 parachutes were fully deployed and within 50 meters of each platform. On the rear clevis restraints of the second platform were found three sets of steel chain tiedowns that are used to secure platforms inside of the cargo aircraft. The extraction parachutes were found within 200 meters of each load. The extraction chains did not appear to have damage, although it was approximately 50 feet in the air and draped across two trees. The canopy sustained extensive damage during recovery from the trees.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Cause could not be determined. The extraction parachute for load 1 of 2 has been sent to Natick.</p>				



**ANALYSIS: 49**

**WHAT WAS THE MALFUNCTION?**

Extraction parachute did not inflate fully.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

The extraction parachute did not fully inflate initially and they were chaining it down. Then the extraction parachute inflated and extracted the load.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Check the rigging procedures for the extraction parachute.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION IZFRIC1		7. PT AND LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 1000	10. ASFT SGT (Degrees) 130	11. DFT ELEVATION (Feet) 813 Feet	12. SURFACE WINDS (Knots) 0 Knots	13. VISIBILITY (Feet/Miles) 4 Miles
II. CARGO				
14. TYPE LOAD AND WEIGHT  M996 HMMWV 9750 Lbs	15. MAGNETIC INSTRUCTIONS FOR RELEASE  FM 10-517/ TO 13C7-1-111	16. AERIAL DELIVERY SYSTEM USED		
		17. DUAL RELEASE NO. PLATFORMS 2	18. RELEASE DATE NO. CONTAINERS	19. OTHER (EQUIP)
20. TYPE PLATFORM AND DROP CONTAINER  Type V 16 Foot	21. TYPE PARACHUTE AND NUMBER  G-11B (2)	22. SITE EXTRACTION RELEASE PARACHUTE  22-Foot	23. LENGTH OF RIGGING LINE	24. POSITION OF LOAD IN AIRCRAFT  3 & 4 Second
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The load was the second of a sequential drop of M966 TOW carriers. The first load exited the aircraft okay. The extraction parachute and line bag deployed normally on the second load. The load exited the aircraft okay. On transfer from extraction to deployment mode pieces of debris were seen falling from the load. During the deployment phase the rear right hand side suspension sling got caught between the brush guard and the front of the vehicle. During the sequence the sling destroyed the front driver side portion of the vehicle. The suspension sling finally broke when it came in contact with the steel radiator mounting bracket. The front suspension sling also broke. The load was now only suspended by the two left hand suspension slings. Both G-11B parachutes opened fully. The HMMWV landed on the driver side and was heavily damaged.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>At this time the reason for this malfunction is unknown. The suspension slings were correct type and length. They were also new. The vehicle was not overloaded or too light. The extraction parachute and line bag were the correct size and length, no damage was found on the extraction d-bag, line bag or extractin line. The aircraft was inspected by both the riggers and Air Force crew and no damage was found to the aircraft floor or sides.</p>				

**ANALYSIS: 50**

**WHAT WAS THE MALFUNCTION?**

Not given.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Suspension sling on the right side was caught on the brush guard, causing them to break and the load came down on its left side.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure that the suspension slings excess is secured tight and properly routed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SERIAL NO.
6. OPERATION (ZFRZ)		7. PLACD LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 800 Feet	10. ASLT SPEED (Knots) 130	11. DEFL ELEVATION (Feet) 328 Feet	12. SURFACE WINDS (Knots) 6	13. VISIBILITY (Feet/Miles) 5 Miles

II. CARGO				
14. TYPE LOAD AND WEIGHT  M998 9,580 Lbs	15. MAGNETIC/INFORMATION SYMBOL  FM 10-517/ TO 13C7-1-111	16. AERIAL DELIVERY SYSTEM USED		
		17. DUAL RAIL	18. COS RELEASE DATE	19. OTHER (E-MAIL)
		20. PLATONIONS 1	21. NO. CONTAINERS	
22. TYPE PLATFORM AND DROP CONTAINER  Type V, 16 Foot	23. TYPE PARACHUTE AND NUMBER  G-11B (2)	24. SIZE EXTRACTION/RE-LEASE PARACHUTE  22-Foot	25. LENGTH OF REEFING LINE	26. POSITION OF LOAD IN AIRCRAFT  1 of 2
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The 22-foot extraction parachute deployed and did not fully inflate. The extraction parachute appeared to have a pear shape. The load did not extract. The aircraft made two passes over the DZ. During the third pass (approximately 8-10 minutes from initial deployment), the 22-foot extraction parachute fully inflated and the load extracted. The 22-foot extraction for the sequential load deployed normally and was cutaway since load 2 of 2 had already been restrained by the loadmasters. Load 1 of 2 landed under 2 x G-11Bs on the surveyed DZ although it was inside the tree line. The load landed with no problems.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The initial 22-foot extraction parachute was found in a tree approximately 300 meters from the load. The parachute was recovered and a TRI was performed with results attached. The parachute has been sent to Natick for analysis. Air Force checks of the rails/locks indicated no problems.</p>				

**ANALYSIS: 51**

**WHAT WAS THE MALFUNCTION?**

Not given.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

22-foot extraction did not fully inflate. Loadmasters were securing the load in the aircraft when the 22-foot extraction parachute fully inflated and extracted.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Check rigging/packing procedures for 22-foot extraction parachute.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION (ZFRN)		7. PF AND LOCATION		8. DATE AND TIME
9. ALT ALTITUDE (Feet) 950 MSL	10. ACFT SPEED (Knots) 140	11. DEFL ELEVATION (Feet) 400	12. SURFACE WINDS (Knots) 350 @ 11	13. VISIBILITY (Feet/Miles) Unlimited

II. CARGO				
14. TYPE LOAD AND WEIGHT  Unilateral 3250 LBS	15. MAGNETIC INFLUENCE PROTECT  FM 10-500-2/ TO 13C7-1-5	16. AERIAL DELIVERY SYSTEM USED		
		17. DUAL MAIL NO. PLATFORMS 1	18. COS RELEASE DATE NO. CONTAINERS	19. OTHER (E-MAIL) EFTC
20. TYPE PLATFORM AND DROP CONTAINER 8-Foot Type V	21. TYPE PARACHUTE AND NUMBER G-12 (2)	22. SITE EXTRACTION RELEASE PARACHUTE 15-Foot Ring Slot	23. LENGTH OF REEFING LINE	24. POSITION OF LOAD IN AIRCRAFT FS 459
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>During extraction phase, the platform over came the right hand locks and started to exit the aircraft when the extraction line recoiled back into the aircraft. The platform exited the aircraft and impacted the DZ w/minor damage.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Failure of the type IV connector link caused the extraction line to separate from the EX-chute. Platform had enough momentum to exit the aircraft. Due to no EX-chute, main cargo parachutes did not deploy. Type IV connector was not recovered. Rigging of the extraction system was IAW -9.</p>				

**ANALYSIS: 52**

**WHAT WAS THE MALFUNCTION?**

Not given.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Extraction line separated from the extraction parachute due to the type IV connector link.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Check the face plate of type IV link. Do away with type IV.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIDED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SERIAL NO.
6. OPERATION / EFFORT		7. PT AND LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet) 898 AGL	10. A/C SPEED (Knots) 145 KIAS	11. ALTITUDE (Feet) 1532	12. GROUND WINDS (Knots) 270/10 knots	13. VISIBILITY (Feet/Miles) Unlimited

II. CARGO				
14. TYPE LOAD AND WEIGHT  Heavy Equipment 2700 LBS	15. MAGNETIC INFLATION PARACHUTE  FM 10-512/ TO 13C7-1-8	16. AERIAL DELIVERY SYSTEM USED		
		17. DUAL RELEASE NO. PLATFORMS 1	18. RELEASE DATE NO. CONTAINERS	19. OTHER (EQUIP)
20. TYPE PLATFORM AND DROP CONTAINER  Type V	21. TYPE PARACHUTE AND NUMBER  G-12E (2)	22. SITE EXTRACTION RELEASE PARACHUTE  15-Foot Ringslot	23. LENGTH OF RIGGING LINE	24. POSITION OF LOAD IN AIRCRAFT  FS 850
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>At approximately 15 seconds prior to the release point, the PDM (parachute deployment mechanism) deployed the drogue parachute. The parachute and drogue elongated and completed a normal inflation. The aircraft continued a normal drop sequence and at 4 seconds prior to release, the drogue parachute collapsed. A malfunction was immediately called and the loadmaster jettisoned the drogue parachute and line. The aircraft landed without further incident.</p> <p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The drogue parachute collapsed from catastrophic material failure. Four of eight suspension lines on one side of the adapter web broke near the L-link. The remaining suspension lines broke closer to the canopy skirt or had blown or damaged panels. The other side of the adapter web had no broken suspension lines but it did have two damaged panels. This parachute was manufactured in Jan 1985 and placed into service on June 1996 and was on its 27th airdrop. This parachute had repairs at three different times totaling 6.9 hours. The intentional use of this parachute was supposed to be for extraction only and should not have been used as a drogue in this stage of its life cycle.</p>				



**ANALYSIS: 53**

**WHAT WAS THE MALFUNCTION?**

Not given.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Drogue parachute collapsed during deployment.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Do not use extraction for drogue.
2. Separate the drogue parachutes and count the number of drops on each parachute.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION IZFRIC1		7. PT AND LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 550	10. ASFT SAFE (Q) (Feet) 140	11. DFT ELEVATION (Feet) 240	12. SURFACE WINDS (Knots) 340@11 K	13. VISIBILITY (Feet/Miles) Unlimited

II. CARGO				
25. TYPE LOAD AND WEIGHT  Heavy training platform 3640 LBS	26. MAGNETIC/INFORMATIONAL FM 10-512/ TO 13C7-1-8 FM 10-500-2/ TO 13C7-1-5	27. AERIAL DELIVERY SYSTEM USED		
		28. DUAL RELEASE NO. PLATFORMS 1	29. COS RELEASE RATE NO. CONTAINERS	30. OTHER (if any)
31. TYPE PLATFORM AND DROP CONTAINER 8-Foot Type V	32. TYPE PARACHUTE AND NUMBER G-12E (2)	33. SITE EXTRACTION/RE-LEASE PARACHUTE 15-Foot Extraction	34. LENGTH OF REEFING LINE	35. POSITION OF LOAD IN AIRCRAFT FS 577/ FP 523
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The number 8 left hand lock was engaged in the platform preventing extraction. During the pre-slowdown checklist, the crew removed the left hand locks. They felt they removed too many locks forward of the platform and decided to re-engage up to lock number seven. When re-engaging lock seven, lock 8 inadvertently fell into the platform without them noticing.</p> <p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Load failed to extract. Loadmaster pulled right hand crossover to the emergency position. Load still failed to extract. Loadmaster initiated emergency procedures and cut extraction line aft of the attachment point. The loadmaster was struck by the 60 foot line recoiling after he cut it causing numerous contusions to the right hand. The extraction parachute and extraction line were recovered 3 miles from the DZ and totally destroyed.</p>				

**ANALYSIS: 54**

**WHAT WAS THE MALFUNCTION?**

Not given.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Loadmaster did not follow checklist.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure proper procedures are followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION IZFRIC1		7. PF AND LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 800 Feet	10. ASLT SPEED (Knots) 130 KIAS	11. DEFL ELEVATION (Feet) 980 Feet	12. SURFACE WINDS (Knots) 5 Gust 7	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
25. TYPE LOAD AND WEIGHT  CDS bundle 1100 LBS	26. INSTRUCTIONS FOR PARACHUTE  FM 10-500-3/ TO 13C7-1-11	27. AERIAL DELIVERY SYSTEM USED		
		28. DUAL RELEASE NO. PLATFORMS	29. CDS RELEASE RATE NO. CONTAINERS	30. OTHER (if any)
			5	
31. TYPE PLATFORM AND DROP CONTAINER A-22 Container	32. TYPE PARACHUTE AND NUMBER G-12E (1)	33. SITE EXTRACTION/RE-LEASE PARACHUTE	34. LENGTH OF REEFING LINE	35. POSITION OF LOAD IN AIRCRAFT 4
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>G-12E parachute deployed from bag but failed to inflate. The load streamed in and was destroyed. Training load had no value.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Suspension line ties were loose. All ties slid up to the edge of the lower lateral band of the parachute, keeping it from catching air. Also, load was right a minimum weight for parachute.</p>				

**ANALYSIS: 55**

**WHAT WAS THE MALFUNCTION?**

G-12E did not inflate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Parachute not rigged properly.
2. Suspension line ties were loose.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Rig IAW proper TO.
2. Ensure proper packing procedures are followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING ADJUSTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SERIAL NO.
6. OPERATION (EXERCISE)		7. PLAC AND LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet) 1250 AGL	10. ACFT SPEED (Knots) 130 Kts	11. DEPTH/ELEVATION (Feet) 0 feet	12. SURFACE WINDS (Knots) 6 knots	13. VISIBILITY (Feet/Miles) 15 miles
III. CARGO				
19. TYPE LOAD AND WEIGHT C2 CRRC Bundle 501 LBS	20. MAGNETIC/ANTENNA/PAIRING FM 10-542/ TO 13C7-51-21	21. AERIAL DELIVERY SYSTEM USED		
		22. DUAL RELEASE NO. PLATFORMS	23. CDS RELEASE DATE NO. CONTAINERS 1	24. OTHER (E-MAIL)
25. TYPE PLATFORM AND DROP CONTAINER C2 CRRC	26. TYPE PARACHUTE AND NUMBER G-12 (1).	27. SITE EXTRACTION/RE-LEASE PARACHUTE 15-Foot Extraction	28. LENGTH OF REEFING LINE	29. POSITION OF LOAD ON AIRCRAFT Right Side/Static line hooked up on left over head anchor cable
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  Hydraulic parachute release attached to cargo parachute malfunctioned. G-12 cargo parachute prematurely released from C2 bundle resulting in a complete CRRC bundle malfunction. Loss of CRRC, motor and two gas tanks.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  Hydraulic release failure.				

**ANALYSIS: 56**

**WHAT WAS THE MALFUNCTION?**

Hydraulic parachute release malfunction.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Equipment failure.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Inspect equipment.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION IZFRIC1		7. PT AND LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 500	10. ASFT SGT (Q) (Feet) 130	11. DFT ELEVATION (Feet) 123	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

II. CARGO				
25. TYPE LOAD AND WEIGHT  CDS 660 LBS	26. MAGNETIC INSTRUCTIONS/REMARKS  FM 10-500-3/ TO 13C7-1-11	27. AERIAL DELIVERY SYSTEM USED		
		28. DUAL MAIL	29. CDS RELEASE DATE	30. OTHER (if any)
		31. NO. PLATONIONS	32. NO. CONTAINERS 1	
33. TYPE PLATFORM AND DROP CONTAINER  A-22	34. TYPE PARACHUTE AND NUMBER  G-14 (2)	35. SITE EXTRACTION/RE-LEASE PARACHUTE	36. LENGTH OF REEFING LINE	37. POSITION OF LOAD IN AIRCRAFT  Centerline
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>As the CDS exited the aircraft, the crew noticed that one of the G-14s did not fully deploy. This was confirmed by the DZ party. During the bundle's descent, the parachute did inflate and the load landed on the DZ with no damage.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Suspected cause is air starvation of the G-14.</p>				



**ANALYSIS: 57**

**WHAT WAS THE MALFUNCTION?**

G-14 did not fully deploy initially but opened prior to hitting ground.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Air starvation.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Have bundles side by side in the aircraft.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING ASSESSED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION (ZFRUIT)		7. PL AND LOCATION		8. DATE AND TIME
9. ASLT ALTITUDE (Feet) 800 AGL	10. ACFT SPEED (Knots) 135 KIA	11. DFT ELEVATION (Feet) 6500 MSL	12. SURFACE WINDS (Knots) 3 Knots	13. VISIBILITY (Feet/Miles) Clear

II. CARGO				
14. TYPE LOAD AND WEIGHT  CDS 1450 Lbs	15. INSTRUCTIONS FOR HANDLING  FM 10-500-3/ TO 13C7-1-11	16. AERIAL DELIVERY SYSTEM USED		
		17. DUAL MAIL NO PLATFORMS	18. CDS RELEASE DATE 1 of 2	19. OTHER (if any)
20. TYPE PLATFORM AND DROP CONTAINER  CDS	21. TYPE PARACHUTE AND NUMBER  G-12E (1)	22. SITE EXTRACTION/RE-LEASE PARACHUTE  Pilot	23. LENGTH OF RIGGING LINE	24. POSITION OF LOAD IN AIRCRAFT  FS 700

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The container exited aircraft normally. Deployment phase appeared normal. No canopy abnormalities were observed. Upon canopy recovery it was noted that the centering line was broken approximately 4 feet 5 inches from apex. Load descended and landed normally. TRI of parachute resulted in light burns the complete length of centering line. Burn hole approximately 4 inches diameter on gore 31 approximately 8 inches up from lower lateral band. No further canopy damage was found. No burns were found on suspension lines or risers. Parachute was packed IAW TM 10-1670-281-23&P.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Could not determine what caused burns on centering line or canopy burn hole. Load exited aircraft at approximately 7200 MSL. Suspect increased opening shock due high altitude drop zone greatly assisted in breaking centering line. Same pass second CDS had zero damage, weight of load was 850 pounds.

**ANALYSIS: 58**

**WHAT WAS THE MALFUNCTION?**

Broken center line.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Possibly bad line.
2. Need more information or see parachute to determine exact cause.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Inspect lines closely before packing the parachute.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING ADJUTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION IZFRICI		7. PF AND LOCATION		8. DATE AND TIME
9. ALTITUDE (Feet)	10. ACFT SPEED (Knots)	11. DEPTH (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
600	130	484	0-5	Unlimited

II. CARGO				
14. TYPE LOAD AND WEIGHT  Stinger Bundle A-22 885 Lbs	15. INSTRUCTIONS FOR HANDLING  FM 10-550/ TO 13C7-22-71	16. AERIAL DELIVERY SYSTEM USED		
		17. DUAL MAIL	18. CDS RELEASE DATE	19. OTHER (If any)
		20. PLATONIONS	21. NO. CONTAINERS 5	
22. TYPE PLATFORM AND DROP CONTAINER  CDS A-22	23. TYPE PARACHUTE AND NUMBER  G-12E.(1)	24. SIZE EXTRACTION RELEASE PARACHUTE  68-Inch	25. LENGTH OF REEFING LINE	26. POSITION OF LOAD IN AIRCRAFT  3rd
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Stinger bundle exited aircraft third in a single stick of 5 center line loaded on C-130. The G-12E failed to elongate resulting in a total malfunction. The stinger bundle was destroyed.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Stinger bundle exited aircraft normally. 68-inch pilot parachute deployed upon G-12E extraction from load. The suspension line stows failed to extract from stow panel. Upon investigating G-12, the last suspension line tie was not tight resulting in the risers slipping through the suspension line tie pulling the second suspension line stow into the first suspension line stow.</p>				

**ANALYSIS: 59**

**WHAT WAS THE MALFUNCTION?**

G-12E failed to inflate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper packing procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Perform closer inspection when packing parachutes.
2. Rig in accordance with proper rigging manuals.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SERIAL NO.
6. OPERATION (ZFRZ)		7. PF AND LOCATION	8. DATE AND TIME	
9. ALTITUDE (Feet)	10. ALTITUDE (Feet)	11. DEPRESSION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
1040	145	265	Calm	3 Miles

II. CARGO				
14. TYPE LOAD AND WEIGHT  A-22 CDS 800 LBS	15. INSTRUCTIONS FOR HANDLING  FM 10-500-3/ TO 13C7-1-11	16. AERIAL DELIVERY SYSTEM USED		
		17. DUAL RAIL	18. CDS RELEASE GATE	19. OTHER (Describe)
		20. PLATONIONS	21. NO. CONTAINERS 1	CVR
22. TYPE PLATFORM AND DROP CONTAINER  A-22 Container	23. TYPE PARACHUTE AND NUMBER  G-12E (1)	24. SITE EXTRACTION RELEASE PARACHUTE	25. LENGTH OF RIGGING LINE	26. POSITION OF LOAD IN AIRCRAFT  STA 976
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The first container exited the aircraft with no problems. The second container released from the gate release mechanism properly moved approximately 1-3 feet and stopped.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The skidboard was bowed causing the bundle to become lodged in the rail (therefore causing the malfunction).</p>				

**ANALYSIS: 60**

**WHAT WAS THE MALFUNCTION?**

Bundle stuck in rail (logistic).

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Skidboard was bowed logistic rail latch contacted skidboard.
2. Raised screw on latch.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Check skidboards to see if bundle binds.
2. Don't drop at least on that side.
3. Inspect the skidboard condition by rolling the container in and out of the dual rails.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION IZFRICI		7. PT AND LOCATION		8. DATE AND TIME
9. ALT ALTITUDE (Feet) 1100 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DEFL ELEVATION (Feet) 390 Feet	12. SURFACE WINDS (Knots) 270/5	13. VISIBILITY (Feet/Miles) 7000

II. CARGO				
25. TYPE LOAD AND WEIGHT  CDS Delivery/ Rubber Duck	26. MAGNETIC INFLATION PARACHUTE  Not Given	27. AERIAL DELIVERY SYSTEM USED		
		28. DUAL RELEASE NO. PLATFORMS	29. CDS RELEASE DATE NO. CONTAINERS	30. OTHER (if any)
25. TYPE PLATFORM AND DROP CONTAINER  Not Given	26. TYPE PARACHUTE AND NUMBER  Not Given	27. SITE EXTRACTION RELEASE PARACHUTE  Not Given	28. LENGTH OF RIGGING TIME	29. POSITION OF LOAD IN AIRCRAFT  Not Given
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Cargo parachute failed to deploy on exit for rubber duck deployment of Zodiac raft and Mars engine attached. Zodiac and engine held up suprisingly well when they landed. More time is needed to assess damage to both items. No personal were injured.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Investigation suggests that the load used to balance the weight of the pallet was too light to counter balance the pull parachute.</p>				



**ANALYSIS: 61**

**WHAT WAS THE MALFUNCTION?**

Parachute did not deploy.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Improper rigging procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Need more information.

**AIRCRAFT MALFUNCTION REPORTS AND ANALYSES**

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING LAUNCHED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 2459 M	10. ACFT SP (TD) (Knots) 130	11. CRG ELEVATION (Feet) 1790	12. SURFACE WINDS (Knots) 190/10	13. VISIBILITY (Feet/Miles) CAVOK

III. CARGO				
23. TYPE LOAD AND WEIGHT  HiV CDS/ Training 1075 LBS	24. RIGGED W/FFI/FM/CAN/MAN/NDC  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIRECTION OF RELEASE  High Velocity
		29. NO. PLATFORMS	30. NO. CONTAINERS 1	
31. TYPE PLATFORM AIR DROP CONTAINER  A-22	32. TYPE PARACHUTE AND NUMBER  26-Foot Ring Slot (1)	33. S-21 EXTRACTION RELEASE PARACHUTE	34. LENGTH OF BEETING LINE	35. POSITION OF LOAD IN AIRCRAFT  737

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)  
At green light, CP activated the light, activating the static line retriever. The cable went taut, broke the 80 pound safety tie however it failed to cut the gate.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)  
Upon inspection of the retriever it was discovered that the cup was not seated properly. Also the beaded chains were different lengths. The top was 4 11/16 while the bottom was 4 5/8.

CONTINUED ON NEXT PAGE

**ANALYSIS: 62**

**WHAT WAS THE MALFUNCTION?**

Western gear failure.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Could have been weak spring.
2. Equipment failure.
3. Beaded chain different length.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure loadmaster follows preflight procedures/checklist.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT/BRG/ALPHED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1200 AGL	10. ACFT SPD (Knots) 150	11. CRB ELEVATION (Feet) 1300	12. SURFACE WINDS (Knots) 4	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT  Dual Row (DRAS) L-3 10,300 R-1 10,070	24. RIGGED W/PT/FMT/CAN/MIN/NO	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL RAIL	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS 8	30. NO CONTAINERS	
31. TYPE PLATFORM AIR DROP CONTAINER  Type VI (216 x 88)	32. TYPE PARACHUTE AND NUMBER  G-11A(3)	33. S-21 EXTRACTION RE-LEASE PARACHUTE	34. LENGTH OF BEETING TIME	35. POSITION OF LOAD IN AIRCRAFT  Left 3, Right 1

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

First malfunction: DRAS platforms in L1, L2, and L4 released normally. L3 locks (logistic lock set 6) did not release until L2 slammed into it. Second malfunction: Platform in position R1 released normally but took approximately 30 seconds to exit the aircraft.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Suspected cause of malfunction #1: Logistic locks stalled and did not fully retract from the platform. However, the lock actuator was able to get the lock pawl over center, allowing the force from L2 to push the locks down below platform level. Suspected cause of malfunction #2: The platform was not bowed, however it was loaded in such a manner that it was positioned tight up against the outboard rail. The friction caused by the platform to rail contact significantly reduced the exit speed. Postfight review of the outboard rails revealed a visible scrape mark from the platforms starting position to the aft end of the cargo floor.

CONTINUED ON NEXT PAGE

**ANALYSIS: 63**

**WHAT WAS THE MALFUNCTION?**

Still testing.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Still testing.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Still testing.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT/BRIG/ACTIVITY	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO
6. OPERATION/EXERCISE		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet)	10. ACFT SPD (Knots)	11. CRB ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
NA	NA	NA	NA	NA

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 1500 Lbs each	24. RIGGED W/PT (FM/CM/AM/IM) NO:  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		26. PARA. RAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		NO PLATFORMS	NO CONTAINERS 8	
29. TYPE PLATFORM AIR DROP CONTAINER	30. TYPE PARACHUTE AND NUMBER	31. EXTRACTOR RELEASE PARACHUTE	32. LENGTH OF BEETING LINE	33. POSITION OF LOAD IN AIRCRAFT
A-22	G-12E (1)			FS 800

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Eight (four on each side) CDS bundles, weighing a total of 12,000 pounds, were rigged for airdrop with one aft release gate. The gate release mechanism (GRM) was attached to the left number three GRM outlet. Aircraft and bundle rigging/inspection was accomplished IAW current directives. On takeoff roll, the GRM released the aft restraint gate and the bundles rolled aft in the aircraft. The loadmaster informed the pilot of the problem and the takeoff was aborted at approximately 30 knots. Once the aircraft brakes were applied, the forward left and right bundle rolled forward to their original position. The remaining six bundles were wedged in the rails and did not move. There was no damage to the aircraft; however, the aft six container skid boards were destroyed. Although this was not truly an "airdrop" malfunction, this report is being submitted as a tracking document.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The obvious cause of this incident is the fact that the GPM released prematurely. A definite cause for the release has not yet been determined. An investigation into the cause is being conducted through Air Force safety channels and the aircraft contractor.

CONTINUED ON NEXT PAGE

**ANALYSIS: 64**

**WHAT WAS THE MALFUNCTION?**

Gate release mechanism released on takeoff.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Not properly locked (GRM).

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Inspect GRM to ensure properly locked.



# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE A/C C-130	5. ACFT SER NO
6. OPERATION EXTREME		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPD (Knots) 140	11. CRB ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  HE/Mass 2695 Lbs	24. RIGGED UNIT IDENTIFICATION NO.  FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> 26. DUAL MAT.	<input type="checkbox"/> 27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO. PLATFORMS 1		
29. TYPE PLATFORM AIR DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  G-12E (2)	28. EXTRACTION RELEASE PARACHUTE  15-Foot Ring Slot	29. LENGTH OF BEARING LINE	30. POSITION OF LOAD IN AIRCRAFT  Lock #8
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Right hand crossover pulled. Extraction parachute good fully inflated.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Number 8 lock failed pressure check. Lock replaced. No damage to load or aircraft.</p>				

CONTINUED ON NEXT PAGE

**ANALYSIS: 65**

**WHAT WAS THE MALFUNCTION?**

Right hand lock failed.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Equipment failure.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Increase maintenance checks.
2. Ensure proper preflight procedures are followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING ANALYZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) UNK	10. ACFT SP (TD) (Knots) UNK	11. CRB ELEVATION (Feet) UNK	12. SURFACE WINDS (Knots) UNK	13. VISIBILITY (Feet/Miles) UNK

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 1200 Lbs	24. RIGGED WFF (FM/CM/AM/WM) NO:  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS	30. NO CONTAINERS 1	
31. TYPE PLATFORM AIR DROP CONTAINER  A-22	32. TYPE PARACHUTE AND NUMBER  G-12E (1)	33. EXTRACTOR OR RELEASE PARACHUTE	34. LENGTH OF REEFING LINE	35. POSITION OF LOAD IN AIRCRAFT  617

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Aircraft incident. At green light static line retriever operated approximately 1 second drawing all slack out of cable and stopped. Maintenance operations checked the 3 second timer and winch. Timer was good, winch was replaced.

32. CAUSE OF MALFUNCTION/FAILURE (if more space is needed, continue on reverse.)

Malfunctioning western gear winch.

CONTINUED ON NEXT PAGE

**ANALYSIS: 66**

**WHAT WAS THE MALFUNCTION?**

Western gear static line retriever failed to run the full cycle and cut the CDS gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Winch failure.
2. Limit switch gap set too close.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Ensure winch is set at the correct gap.
2. Reengineer winch design by removing beaded chains and limit switch.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING ANALYZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREME		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 700 Feet A	10. ACFT SP (TD) (Knots) 130 Feet	11. CRB ELEVATION (Feet) 230 Feet	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 1300 Lbs	24. RIGGED WINCH/FUNCTION/ANVIL NO.  FM 10-500-3/ TO 13C7-11	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT. NO PLATFORMS	27. CDS RELEASE RATE 1	28. DITCHING RATE High Velocity
29. TYPE PLATFORM AIR DROP CONTAINER  A-22 Container	30. TYPE PARACHUTE AND NUMBER  26-Foot High V	31. EXTRACTOR RELEASE PARACHUTE	32. LENGTH OF BEETING LINE	33. POSITION OF LOAD IN AIRCRAFT

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Gate failed to cut load failed to exit. The green light came on and the right western gear static line retriever winch ran for approximately 3 seconds. It did not break the 80 lb safety tie. Upon inspection, nothing on the load was found to be in the way or otherwise preventing the knife from cutting. The pulley was rigged at FS 737 with the gate at FS 720. The spring condition on the winch was good and seated in the cup. Both beaded chains were 5 inches in length. When the JAI first looked at the winch after measuring the beaded chains, I saw that the "cup" was not fully seated. The next day after unsealing the aircraft and looking at the winch again with the loadmaster, the "cup" was fully seated. There was no gap on the limit switch. With this information I thought that the limit switch did cut off the winch but, later when I found the "cup" seated, I had no idea what could have happened. No turbulence was encountered. The western gear static line retriever was last inspected on 24 Aug 2000 and overhauled on 6 Aug 1999. No damage occurred.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After looking at the aircraft and load, the loadmaster determined that it was the western gear static line retriever that slipped when pulling on the cable during the drop. Later when unwound to do a pull test, it tested fine.

CONTINUED ON NEXT PAGE

**ANALYSIS: 67**

**WHAT WAS THE MALFUNCTION?**

Western gear static line retriever failed to operate and cut CDS gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Cup for spring was out of the slot causing the limit switch to engage.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure proper checklist procedures and take off beaded chains, spring/cup and limit switch off the winch.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE A/C	5. ACFT SER NO
			C-130	
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet)	10. ACFT SP (TD) (Knots)	11. CRB ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
UNK	UNK	UNK	UNK	UNK

III. CARGO				
23. TYPE LOAD AND WEIGHT	24. RIGGED W/FF (FM/CN/AMV) NO:	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS	30. NO CONTAINERS	
CDS 700 Lbs	FM 10-500-3/ TO 13C7-1-11		1	
31. TYPE PLATFORM AIR DROP CONTAINER	32. TYPE PARACHUTE AND NUMBER	33. S21 EXTRACTOR RELEASE PARACHUTE	34. LENGTH OF BEARING LINE	35. POSITION OF LOAD IN AIRCRAFT
A-22 Container	26-Foot (1)			FS 410

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Gate failed to cut. The western gear rewound for 1 1/2 seconds to 2 seconds then stopped. The crew then decided to use the other static line retriever IAW 112C-130, Vol 3, Ch 9. After they had unwound the cable, the crew then decided not to drop due to the amount of time it would have taken to re-rig the pulley (FS 430 side gate cut) and the knife in order to use the right side retriever. After landing I saw that the 80 pound safety tie was unbroken, nothing was catching the knife. When unhooked, the winch ran for 3 seconds. As the winch had already been unwound I could not determine if the limit switch engaged to cut off the winch, later the gap was found to be 1/16 inch. Limit screw was safetied, and the beaded chains were found to be 1/8 inch off (not even). The cup when checked by the JAI was fully seated. The last overhaul date was 15 Aug 00.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Other than saying it was the winch I cannot narrow it down any further.

CONTINUED ON NEXT PAGE

**ANALYSIS: 68**

**WHAT WAS THE MALFUNCTION?**

Western gear failed to cut release gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Improper operation of winch.
2. Beaded chains not even.
3. Limit switch gap improper setting.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Measure chain for proper length.
2. Ensure proper preflight procedures are followed.
3. Take off beaded chains, spring cup and limit switch.



# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1250 AGL	10. ACFT SPD (Knots) 130 Knots	11. DZ ELEVATION (Feet) 198	12. SURFACE WINDS (Knots) 4 Knots	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT	24. RIGGED W/PT (FMT/CAN/MAN/NO)	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS	30. NO CONTAINERS	
31. TYPE PLATFORM AIR DROP CONTAINER	32. TYPE PARACHUTE AND NUMBER	33. S-21 EXTRACTION RE-LEASE PARACHUTE	34. LENGTH OF BEETING TIME	35. POSITION OF LOAD IN AIRCRAFT

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

On the third and last pass of the second lift of jumpers, after all the jumpers had exited the aircraft, the loadmaster noticed that the anchor arm had broken from the actuator upper mount bracket. The loadmaster notified the aircraft and retrieved the D-bags. Airdrops were discontinued and aircraft returned to maintenance.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The bolts that hold the anchor arm and actuator upper mount bracket sheared and fell out causing the anchor arm to oscillate freely.

CONTINUED ON NEXT PAGE

**ANALYSIS: 69**

**WHAT WAS THE MALFUNCTION?**

Aft anchor cable arm and actuator mount broken off.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Metal fatigue or improper usage of arms by not putting them in the correct position for the drop.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Inspect if possible during ISO POC inspection.
2. Ensure proper checklist procedures are followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet)	10. ACFT SP (TD) (Knots)	11. CRB ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
650	140	590	Calm	7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 1190 Lbs	24. RIGGED UNIT IDENTIFICATION NO.  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS	30. NO CONTAINERS 1	
31. TYPE PLATFORM AIR DROP CONTAINER  A-22	32. TYPE PARACHUTE AND NUMBER  26-Foot Ring Slot (1)	33. EXTRACTOR RELEASE PARACHUTE	34. LENGTH OF BEARING LINE	35. POSITION OF LOAD IN AIRCRAFT  Pulley St 530

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

At green light, the retriever activated normally. The pulley then fell from the pulley location and the gate did not cut. No damage to the load or aircraft.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon inspection of the 95 inch strap, it was noticed that the 1 inch tubular nylon itself was in tact. The stitching is what gave.

CONTINUED ON NEXT PAGE

**ANALYSIS: 70**

**WHAT WAS THE MALFUNCTION?**

Pulley fell due to material failure.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Old equipment/material.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Change or inspect all straps in fleet.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE A/C	5. A/C TAIL NO.
			C-17	
6. OPERATION EXERCISE		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet)	10. ACFT SP (TD) (Knots)	11. CRB ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
800 AGL	145	289	290m/7	4 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT	24. RIGGED UNIT IDENTIFICATION NO.	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO. PLATFORMS	30. NO. CONTAINERS	
Mass Supply Load 3040 Lbs	FM 10-512/ TO 13C7-1-8	1		
29. TYPE PLATFORM AIR DROP CONTAINER	31. TYPE PARACHUTE AND NUMBER	32. SIZE/EXTRACTION RELEASE PARACHUTE	33. LENGTH OF BEETING TIME	34. POSITION OF LOAD IN AIRCRAFT
Type V	G-12E (2)	15-Foot Ring Slot		1 of 1

## 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

During the release point check 15 seconds prior to the TOT, the right parachute deployment mechanism (PDM) failed to deploy the drogue parachute. The loadmaster activated the PDM backup switch (left side). This action did not release the drogue parachute because the parachute was in the right PDM. The wrong backup switch was activated. The loadmaster initiated the malfunction checklist and the drop was not accomplished. The malfunction checklist was completed immediately, followed by the post drop check.

## 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The right parachute deployment mechanism (PDM) failed to operate during the release point check. The loadmaster failed to activate the right backup drogue parachute switch. The loadmaster activated the left backup drogue parachute switch and nothing happened because there was no parachute in the left PDM.

CONTINUED ON NEXT PAGE

**ANALYSIS:** 71

**WHAT WAS THE MALFUNCTION?**

Parachute deployment mechanism.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Maintenance found bad actuator and switch.
2. Loadmaster failed to follow proper backup procedures.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure soldier activates proper switch.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 570 ft AGL	10. ACFT SPD (T/D) (Knots) 130 KIAS	11. CRB ELEVATION (Feet) 2320 Ft MSL	12. SURFACE WINDS (Knots) 13 Knots	13. VISIBILITY (Feet/Miles) 10 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS High Velocity 700 LBS	24. RIGGED UNIT IDENTIFICATION NO.  FM 10-500-3/ TO 13C7-1-11 Chapter 9	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT. NO PLATFORMS	27. CDS RELEASE RATE 1	28. DITCHING RATE High Velocity
29. TYPE PLATFORM AIR DROP CONTAINER  A-22	30. TYPE PARACHUTE AND NUMBER  26-Foot (1)	31. EXTRACTOR OR RELEASE PARACHUTE	32. LENGTH OF BEETING LINE	33. POSITION OF LOAD IN AIRCRAFT  FS 700

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

At green light, gate failed to cut. Left side Western Gear Retriever used. The spring condition good. Beaded chain lengths 4 3/4 inches. Cup was seated. Limit switch engaged and cut off the winch. Limit switch screw was safety wired. Limit switch gap 1/8 inch. Pull test not accomplished. Winch rewound about 1 second. 80 lb safety tie did not break. The knife did not catch on the load. The knife was sharp. Pulley installed at FS 737. Gate located FS 700. Non CVR. No turbulence encountered. Western Gear Retriever winch was last inspected by maintenance Aug 99. Retriever winch serial number is 1184R123. Impact of malfunction, user unable to accomplish all proficiency testing. No flight hours lost. No damage incurred.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Cause was determined to be the limit switch screw adjustment. Screw readjustd. Retriever rewound satisfactorily.

CONTINUED ON NEXT PAGE

**ANALYSIS: 72**

**WHAT WAS THE MALFUNCTION?**

Western Gear Static Line Retriever failed to cut the CDS release gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Limit switch out of adjustment.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Ensure winches are rigged correctly by maintenance.
2. Remove beaded chains, cup, spring, and limit switch.



# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING LAUNCHED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPD (TOD) (Knots) 140	11. DZ ELEVATION (Feet) 590	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  HE/Mass 2596 LBS	24. LOGGED MAP/FMTCAN/MARKING NO.  FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> 26. DUAL MAT	<input type="checkbox"/> 27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS 1	30. NO CONTAINERS	
31. TYPE PLATFORM AIR DROP CONTAINER  Type V	32. TYPE PARACHUTE AND NUMBER  G12-E (2)	33. EXTRACTOR RELEASE PARACHUTE  15-Foot Ring Slot	34. LENGTH OF BEETING LINE	35. POSITION OF LOCK IN AIRCRAFT  Lock #7
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Right hand crossover pulled. Extraction parachute good fully inflated.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Lock #7 passed inspection/pressure check.</p>				

CONTINUED ON NEXT PAGE

**ANALYSIS: 73**

**WHAT WAS THE MALFUNCTION?**

1. Load failed to extract.
2. Emergency right hand crossover actuated to release load.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Increase lock maintenance.
2. Lock at tolerance limit.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Use other locks.
2. Increase maintenance inspection and testing.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING ANALYZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 600	10. ACFT SPD (TOD) (Knots) 130	11. CRB ELEVATION (Feet) 110	12. SURFACE WINDS (Knots) 080/08	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT  Training CDS 922 LBS rigged	24. RIGGED WAY (FMT/CAN/MAN/NO)  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS	30. NO CONTAINERS 1	
31. TYPE PLATFORM AIR DROP CONTAINER  A-22	32. TYPE PARACHUTE AND NUMBER  26-Foot High V	33. S-21 EXTRACTION RE-LEASE PARACHUTE	34. LENGTH OF REEFING LINE	35. POSITION OF LOAD IN AIRCRAFT  550
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Gate failed to cut.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Western Gear Static Line Retriever Winch, right side was used. Retriever activated but cut off when cable was drawn tight. Suspected cause was pressure on limit switch because of angle of cable from winch to pulley.</p>				

CONTINUED ON NEXT PAGE

**ANALYSIS:** 74

**WHAT WAS THE MALFUNCTION?**

Western Gear Static Line Retriever failure and failed to cut CDS gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Limit switch engaged and shut winch off prematurely.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Ensure maintenance sets switch correctly.
2. Remove beaded chains spring/cup and limit switch.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 800 feet AGL	10. ACFT SP (TO) (Knots) 130 KIAS	11. CRB ELEVATION (Feet) 1800 Feet	12. SURFACE WINDS (Knots) 350@20	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS (Training Load) 1200 LBS	24. RIGGED UNIT IDENTIFICATION NO.  FM 10-500-3/TO 13C7-1-11 Chapter 9	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL RAIL NO PLATFORMS	27. CDS RELEASE DATE NO CONTAINERS 1	28. DITCH RELEASE High Velocity
29. TYPE PLATFORM AIR DROP CONTAINER  A-22 Contanier	30. TYPE PARACHUTE AND NUMBER  26-Foot Ring Slot (1)	31. EXTRACTOR OR RELEASE PARACHUTE	32. LENGTH OF RETRIVING LINE	33. POSITION OF LOAD IN AIRCRAFT  C/B @ FS 660

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The gate failed to cut and the load failed to exit. At "Green Light" the static line retriever winch rewound normally. As the winch cable became taut, the winch stopped rewinding.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon inspection of the western gear static line retriever winch, the spring cup was properly seated and the micro-switch appeared to be functioning properly. However, inspection of the beaded chains revealed that even though they were both between 4 3/4 inches and 5 inches, they were not of equal length. This appears to have led to the micro-switch stopping the winch.

CONTINUED ON NEXT PAGE

**ANALYSIS: 75**

**WHAT WAS THE MALFUNCTION?**

Western gear static line retriever failed to cut release gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Loadmaster did not measure beaded chain properly

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Measure chain correctly.
2. Ensure proper preflight procedures are followed.
3. Remove beaded chains, spring/cup and limit switch.
4. Remove western gear static line retriever from system.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet)	10. ACFT SP (TD) (Knots)	11. CRG ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
650	140	550	3-5	Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT  HE Training 2875 LBS	24. RIGGED UNIT IDENTIFICATION NO.  FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS 1	30. NO CONTAINERS	
29. TYPE PLATFORM AIR DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  G-12E (2)	28. EXTRACTOR RELEASE PARACHUTE  15	29. LENGTH OF BEETING LINE	30. POSITION OF LOAD IN AIRCRAFT  650 C/B
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Extraction parachute deployed and inflated but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right hand locks #9 and 10 setting 1.25. No damage or training lost.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Right hand locks #9 and 10 tested IAW 33D2-37-9-1, locks released at 57-58 ft. lbs.</p>				

CONTINUED ON NEXT PAGE

**ANALYSIS:** 76

**WHAT WAS THE MALFUNCTION?**

Platform failed to extract. Right hand lock emergency crossover actuated to release the load.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Lock could have been at the edge of its tolerance.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure proper lock maintenance is performed.



# TAR&M/SA VOL III

I. GENERAL				
1. UNIT/BRG/ALPHED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet)	10. ACFT SPD (Knots)	11. CRG ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
1260	145	289	070m/5	5 Miles

III. CARGO				
24. TYPE LOAD AND WEIGHT  Mass Supply Load 3050 lbs	25. RIGGED W/FFI/FM/CAN/AVIATION  FM 10-512/ TO 13C7-1-8	26. AERIAL DELIVERY SYSTEM USED		
		27. DUAL MAT.	28. CDS RELEASE DATE	29. DIMENSIONS
		30. NO PLATFORMS 1	31. NO. CONTAINERS	
32. TYPE PLATFORM AIR DROP CONTAINER  Type V	33. TYPE PARACHUTE AND NUMBER  G-12E (2)	34. EXTRACTOR RELEASE PARACHUTE  15- Foot Ring Slot	35. LENGTH OF BEETING LINE	36. POSITION OF LOAD IN AIRCRAFT  1 of 1

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

On the first pass, the first platform exited the aircraft without incident. During the slowdown check on the second pass, the loadmaster tried to arm the Tow Release Mechanism (TRM) and could not get a TRM ARM light. The loadmaster attempted to re-arm the TRM without success. Finally the crew decided to discontinue airdropping and returned to base.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The prox sensors were not properly engaged, which did not allow the TRM ARM light to illuminate. When logic is not satisfactory with the Aerial Delivery System Controller (ADSC) the airdrop cannot be accomplished safely. Maintenance checked the systems and found no defects. They could not duplicate the problem (CND). The aircraft tail number has been noted and will be logged in case the problem continues.

CONTINUED ON NEXT PAGE

**ANALYSIS: 77**

**WHAT WAS THE MALFUNCTION?**

Tow release mechanism would not arm.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Loadmaster did not install link properly.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Properly seat link in mechanism.
2. Install extraction link properly.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT/BRG/ACTIVITY	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXERCISE		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet)	10. ACFT SP (TD) (Knots)	11. CRG ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
UNK	UNK	UNK	UNK	UNK

III. CARGO				
23. TYPE LOAD AND WEIGHT	24. RIGGED WAY (FMT/CAN/MAN) NO.	25. AERIAL DELIVERY SYSTEM USED		
		26. PARA. RAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO. PLATFORMS	30. NO. CONTAINERS	
UNK	UNK			
26. TYPE PLATFORM AIR DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER	28. EXTRACTOR OR RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT
UNK	UNK			

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Aircraft incident - During a personnel drop, after the personnel left uneventfully, the loadmaster let the "D" bags wrap up then started retrieval when the forward quick-disconnect terminal caught up in the 1/4-inch cotton webbing at FS 773. Instead of breaking the 1/4 cotton webbing, the webbing caught on the knurled collar of the quick-disconnect terminal releasing the static line. The same 1/4 inch loop at FS 773 held the quick-disconnect terminal so that the safety was able to attach a 5,000 lb strap to the 54-inch extension and manually retrieve the static lines.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon further investigation, found there three things that contributed to the incident. (1) The tie at FS 773 of 1/4 cotton webbing was two turn single instead of one turn double. This made the tie twice as strong. (2) The size of the loop of 1/4-inch cotton webbing was just large enough to fit the quick-disconnect through tightly. This set up the possiblity of catching on the quick-disconnect terminal. (3) The last and final contributing factor is the quick-disconnect terminal itself was made with deeper than normal knurling which made the collar less slippery.

CONTINUED ON NEXT PAGE

**ANALYSIS:** 78

**WHAT WAS THE MALFUNCTION?**

Wrong rigging procedure by loadmaster.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Loadmaster did not rig properly.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Ensure proper training is given.
2. Ensure rigging procedures checklist is followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet)	10. ACFT SPD (Knots)	11. CRG ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
NA	NA	NA	NA	NA

III. CARGO				
24. TYPE LOAD AND WEIGHT  Mass Supply Load 3500 LBS	25. RIGGED UNIT IDENTIFICATION NO:  FM 10-512/ TO 13C7-1-8	23. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS	30. NO CONTAINERS	
2				
26. TYPE PLATFORM AIR DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER	28. EXTRACTOR RELEASE PARACHUTE	29. LENGTH OF BEETING TIME	30. POSITION OF LOAD IN AIRCRAFT
Type V	G-12 E (2)	15-Foot Ring Slot		1 of 2

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

During a local LVAD mission, on taxi out the #19 and 20 right rail airdrop locks disengaged. The loadmaster relocked and armed the locks. This happened several times in flight, platform was secured with tiedown devices and a no-drop decision was made. All events were prior to initiation of airdrop checklists. On investigation the locks only retracted if they were armed. NOTE: At no time did the left rail locks disengage.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

According to the rail shop, the #19 variable restraint lock failed (this is what sets the amount of aft restraint that the lock group is set to). This caused the lock to go to the zero aft restraint setting when armed. This allowed both locks 19 and 20 to release when pressure was applied. The aft lock restraint hydraulically equalized between all locks set in the platform.

CONTINUED ON NEXT PAGE

**ANALYSIS:** 79

**WHAT WAS THE MALFUNCTION?**

Right lock failed.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Variable restraint lock failed.
2. Could not properly set lock.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure lock maintenance procedures are properly followed.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT/BRG/ACTIVITY	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO
6. OPERATION EXTENT		7. DTG AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 550 AGL	10. ACFT SP (TD) (Knots) 150 KCAS	11. DZ ELEVATION (Feet) 1175 Feet	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  LVAD 3400 LBS	24. RIGGED UNIT IDENTIFICATION NO:  FM 10-500-2/ TO 13C7-1-5 FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL RAIL	27. CDS RELEASE DATE	28. DIRECTION
		29. NO PLATFORMS 1	30. NO CONTAINERS	
29. TYPE PLATFORM AIR DROP CONTAINER  Type V/EFTC	32. TYPE PARACHUTE AND NUMBER  G-12E (2)	33. EXTRACTOR RELEASE PARACHUTE  15-Foot Ring Slot	34. LENGTH OF REEFING LINE	35. POSITION OF LOAD IN AIRCRAFT  FS 940

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This was a local training mission consisting of two heavy equipment airdrops. All procedures and checklists were accomplished through the first drop without any problems. The second airdrop was uneventful up through the completion of the slowdown checklist. At "green" light, the extraction parachute deployed normally but the platform failed to exit. The secondary loadmaster actuated the right hand lock release handle and the platform still failed to exit. The primary loadmaster notified the crew of a malfunction and initiated the malfunction checklist. Both loadmasters proceeded aft to chain down the platform. After the platform was secured and as the primary loadmaster began to cut the extraction line, the extraction parachute collapsed. Shortly thereafter, the extraction line was cut free, with the assistance of the secondary loadmaster. When the secondary loadmaster continued with the checklist by engaging the left hand locks, he noticed that one of the locks was already engaged (rail lock #15). The aircrew completed all remaining checklists and returned to home station without incident. Due to the amount of time it takes to chain a platform down and cut the extraction line, the extraction parachute and line landed approximately 3 miles off the drop zone and reservation. The local tactics flight conducted an off-DZ board.

CONTINUED ON NEXT PAGE

**32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)**

The obvious cause of this malfunction is that there was a left hand lock engaged in the platform at the release point. The secondary loadmaster, who verified lock retraction during the slowdown checklist, was positive that all locks had been retracted. With this taken into account, the left lock must have “fallen” back into the platform sometime between the completion of the slowdown checklist and the release point. The aircraft was turned over to maintenance and the results of their lock inspection is still pending.

**ANALYSIS: 80**

**WHAT WAS THE MALFUNCTION?**

Load did not extract from aircraft.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

1. Lock engaged at release point (in platform).
2. Left lock fell back in.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Make sure the locks are removed from platform.



# TAR&M/SA VOL III

I. GENERAL				
1. UNIT/BRG/ALPHED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-5	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 600 AGL	10. ACFT SPD (Knots) 180 KTS	11. CRG ELEVATION (Feet) 265	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7+ Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT  Mass Supply Load 3010 Lbs	24. RIGGED UNIT IDENTIFICATION NO.  FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO PLATFORMS 4	30. NO CONTAINERS	
31. TYPE PLATFORM AIR DROP CONTAINER  Type V	32. TYPE PARACHUTE AND NUMBER  G-12E (2)	33. EXTRACTOR RELEASE PARACHUTE  15-Foot Ring Slot	34. LENGTH OF BEARING LINE	35. POSITION OF LOAD IN AIRCRAFT  4 of 4

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Malfunction happened on the fourth of four single heavy passes. During preslowdown airdrop checklist, after the loadmaster gave the master control handle a full rotation the rack assembly and arming trigger showed intransit. A no-drop was called and crew returned to home base. The system worked normally during preflight and for the first three drops.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Malfunction of the master control handle. System worked upon post drop inspection. No problem with system found by maintenance.

CONTINUED ON NEXT PAGE

**ANALYSIS: 81**

**WHAT WAS THE MALFUNCTION?**

Arming trigger of master control handle failed to arm.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Loadmaster did not fully rotate handle.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure personnel are properly trained on procedures.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE A/C	5. A/C TAIL NO.
			C-141	
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. A/CFT ALTITUDE (Feet)	10. A/CFT SPD (Knots)	11. DZ ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
550 AGL	150 KCAS	1175 Feet	Calm	7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT	24. RIGGED W/PT (FMT/CM/AM/IR) NO.	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMENSIONS
		29. NO. PLATFORMS	30. NO. CONTAINERS	
LVAD 3000 LBS	FM 10-500-2/ TO 13C7-1-5 FM 10-512/ TO 13C7-1-8	1		
29. TYPE PLATFORM AIR DROP CONTAINER	31. TYPE PARACHUTE AND NUMBER	32. SIZE EXTRACTION RELEASE PARACHUTE	33. LENGTH OF BEETING LINE	34. POSITION OF LOAD IN AIRCRAFT
Type V/EFTC	G-12E (2)	15-Foot Ring Slot		FS 900

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This was the second airdrop of this local training sortie. All procedures and checklists were accomplished without incident up to the release point. At "green" light, the pilot not flying activated the parachute release switch and the extraction parachute did not release from the parachute holder (bomb rack). Realizing that the extraction parachute had not deployed, the loadmaster, with some difficulty, activated the extraction parachute manual release handle and the parachute deployed. The platform exited the aircraft without any further incident. Due to the difficulty, the loadmaster experienced with the manual release handle, the platform landed 600 yards long, but was still on the drop zone.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The aircraft was turned over to maintenance, who will determine if a problem exists with the parachute release switch or an electrical problem with the entire release system.

CONTINUED ON NEXT PAGE

**ANALYSIS: 82**

**WHAT WAS THE MALFUNCTION?**

Extraction parachute deployed properly.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Procedures checking out handle.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Train crew members on proper pulley release handle procedures.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE A/C	5. A/C TAIL NO.
			C-130	
6. OPERATION EXERCISE		7. DTG AND LOCATION		8. DATE AND TIME
9. A/CFT ALTITUDE (Feet)	10. A/CFT SP (TO) (Knots)	11. CDR ELEVATION (Feet)	12. SURFACE WINDS (Knots)	13. VISIBILITY (Feet/Miles)
2670 MSL	130 KIAS	1424 MSL	Calm	1/2 Mile

III. CARGO				
23. TYPE LOAD AND WEIGHT	24. RIGGED WINCH/FUNCTION/REFERENCE	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE GATE	28. DELIVERY METHOD
		29. NO PLATFORMS	30. NO. CONTAINERS	
A-22 CDS 1600 LBS	FM 10-500-3/ TO 13C7-1-11 Chapter 8		2	High Velocity
31. TYPE PLATFORM AIR DROP CONTAINER	32. TYPE PARACHUTE AND NUMBER	33. EXTRACTOR OR RELEASE PARACHUTE	34. LENGTH OF RIGGING LINE	35. POSITION OF LOAD IN AIRCRAFT
48 X 48 X 3/4	26-Foot High V(1)			

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The loadmaster on the airplane stated that at "green light", the western gear static line retriever winch on the right side of the aircraft started to rewind and shut off after one second. The winch stopped rewinding prior to breaking the 80 pound safety tie on the guillotine knife. The Type XXVI nylon release gate was never cut, and the bundles remained in the aircraft. No turbulence was encountered by the aircrew during the time of the malfunction. There was no damage to the bundles or aircraft.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The right hand retriever compression spring was in good condition with the cup fully seated, the beaded chains were measured and found to be symmetrical at 4 3/4 inches. The current limit switch was engaged with the limit switch screw safety wired. A pull test was conducted by maintenance and found to be within limits. The serial number and NSN of the retriever was unattainable due to the retriever having been freshly painted to include the data plate. The center of balance for the CDS was at FS 552. The gate was rigged at FS 600 and the pulley was rigged at FS 617. Maintenance discovered a wire intermittently shorting out in the airdrop troop jump light on the copilot's jump control panel. The malfunction was attributed to the electrical short. Due to the malfunction, two loadmasters lost currency on a CDS drop.

CONTINUED ON NEXT PAGE

**ANALYSIS: 83**

**WHAT WAS THE MALFUNCTION?**

Western Gear Static Line retriever cut off prematurely failing to cut the CDS gate.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Electrical short.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

None.

# TAR&M/SA VOL III

I. GENERAL				
1. UNIT BEING AERIALIZED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SP (TD) (Knots) 135 Knots	11. CRB ELEVATION (Feet) Not Given	12. SURFACE WINDS (Knots) 085@7	13. VISIBILITY (Feet/Miles) 8 to 10

III. CARGO				
23. TYPE LOAD AND WEIGHT  CDS 922 Rigged	24. RIGGED MAP/FMTC/NAV/NAV NO.  FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL REL.	27. CDS RELEASE RATE	28. DIRECTION  High Velocity
		29. NO PLATFORMS	30. NO CONTAINERS 1	
31. TYPE PLATFORM AIR DROP CONTAINER  A-22	32. TYPE PARACHUTE AND NUMBER 26-Foot HV (1)	33. EXTRACTOR RELEASE PARACHUTE	34. LENGTH OF HEAVING LINE	35. POSITION OF LOAD IN AIRCRAFT  FS 530

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Gate failed to cut at green light. Retriever winch activated for 3 seconds. Cable and knife were tight against release gate. Safety tie did break. Emergency procedures were accomplished with no other errors encountered.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Dull knife

CONTINUED ON NEXT PAGE

**ANALYSIS: 84**

**WHAT WAS THE MALFUNCTION?**

1. Knife failed to cut gate.
2. CDS gate failed to cut.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Dull knife.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

Ensure knife is properly inspected prior to use.



# TAR&M/SA VOL III

I. GENERAL				
1. UNIT/BRG/ALPHID	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO
6. OPERATION EXTREMS		7. DTG AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1200	10. ACFT SP (TD) (Knots) 140	11. CRG ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) 6-8	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT  HE Training 2875 LBS	24. RIGGED UNIT/FMTCN/AVIRN NO.  FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		26. DUAL MAT.	27. CDS RELEASE DATE	28. DIMEN/WEIGHT
		29. NO PLATFORMS 1	30. NO CONTAINERS	
29. TYPE PLATFORM AIR DROP CONTAINER  Type V	27. TYPE PARACHUTE AND NUMBER  G-12E (2)	28. EXTRACTOR RELEASE PARACHUTE  15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT  630
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock #9 setting 2.50. No damage or training lost.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Right lock #9 tested IAW 33D2-37-9-1. Lock released at 54 foot pounds.</p>				

CONTINUED ON NEXT PAGE

**ANALYSIS:** 85

**WHAT WAS THE MALFUNCTION?**

1. Load failed to extract.
2. Actuated right handle lock emergency crossover to release load.

**WHAT COULD HAVE CAUSED THIS TO HAPPEN?**

Faulty locks.

**WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?**

1. Rotate lock.
2. Have maintenance check out.

**SUMMARY OF  
SUPPLY AND EQUIPMENT DROPS**

**3ND TRIANNUAL CY 2000**

	PLATFORM LOAD		SINGLE CONTAINER		CDS		TOTAL	
Number of Drops	1199		171		1359		2729	
Number of Malfunctions	8		0		7		15	
Percentage of Malfunctions	0.67		0		0.52		0.55	
Malfunction Phases:	IP	EF	IP	EF	IP	EF	IP	EF
Extraction	2	3	0	0	2	1	4	4
Deployment-Recovery	1	0	0	0	1	3	2	3
Release	0	2	0	0	0	0	0	2

IP-Incorrect Procedures

EF-Equipment Failure

**SUMMARY OF  
PERSONNEL PARACHUTE JUMPS**

**3RD TRIANNUAL CY 2000**

		C-17	C-130	C-141	OTHER	TOTAL
Nonmaneuverable	Number of Deployments	11,264	31,199	10,235	1,167	53,865
	Number of Malfunctions	0	2	0	1	3
	Percentage of Malfunctions	0.0	0.006	0.0	0.086	0.006
Maneuverable	Number of Deployments	329	3,108	779	4,802	9,018
	Number of Malfunctions	0	1	0	0	1
	Percentage of Malfunctions	0.0	0.032	0.0	0.0	0.011
Free-Fall	Number of Deployments	275	3,184	39	2,101	5,599
	Number of Malfunctions	1	13	0	8	22
	Percentage of Malfunctions	0.36	0.40	0.0	0.38	0.39
Total	Number of Deployments	11,868	37,491	11,053	8,070	68,482
	Number of Malfunctions	1	16	0	9	26
	Percentage of Malfunctions	0.008	0.042	0.0	0.11	0.038

**SUMMARY OF  
PERSONNEL PARACHUTE MALFUNCTIONS**

**3RD TRIANNUAL CY 2000**

	<b>NON- MANEUVERABLE</b>	<b>MANEUVERABLE</b>	<b>FREE-FALL</b>	<b>RESERVE</b>
<b>Number of Deployments</b>	<b>53,865</b>	<b>9,018</b>	<b>5,599</b>	<b>0</b>
<b>Number of Malfunctions</b>	<b>3</b>	<b>1</b>	<b>22</b>	<b>0</b>
<b>Towed Jumper</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Broken Static Line</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Entanglement</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>Failed to Inflate</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Inversion</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Pilot Chute</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>
<b>Semi-inversion</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Suspension Lines</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>0</b>
<b>Other</b>	<b>2</b>	<b>1</b>	<b>10</b>	<b>0</b>
<b>Percentage of Malfunctions</b>	<b>0.006</b>	<b>0.011</b>	<b>0.39</b>	<b>0.00</b>
<b>Fatalities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\*Injuries

**INJURIES OCCURRING ON PARACHUTE OPERATIONS  
AS REPORTED ON DA FORM 285**

**1 JULY - 30 SEPTEMBER 2000**

	<b>C-17</b>	<b>C-130</b>	<b>C-141</b>	<b>UNKNOWN</b>	<b>TOTAL</b>
<b>PLF-Related Injuries</b>	<b>13</b>	<b>9</b>	<b>1</b>	<b>35</b>	<b>58</b>
<b>Main Malfunction</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Misrouting of Static Line</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>6</b>
<b>Entanglements</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>
<b>Tree Landings</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>
<b>In Aircraft</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Hazards on Drop Zone</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>3</b>
<b>Other</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>12</b>	<b>17</b>
<b>Insufficient Information</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

## AIRCRAFT MALFUNCTIONS

These malfunction reports are not included in the statistical data nor reflected in the percentage of malfunctions. All aircraft systems malfunctions which may have led to an abort or no-drop are constantly reviewed and analyzed for repeat or recurring trends and solutions. Corrective actions are recommended through Air Force maintenance systems.

PERSONNEL DROPS	
Improperly operating doors or ramps	0
Static line retriever	2
SUPPLY AND EQUIPMENT DROPS	
Rail locks	8
Improperly operating ADS	1
Improperly operating doors or ramps	0
Release mechanism	3
Electrical system	1
CONTAINER DROPS	
Rollers	0
Type XXVI gate	1
Static line retriever	9
Release Mechanism	1
<b>TOTAL</b>	<b>26</b>

## HOT POOP

The following messages were sent out during this quarter.

Message dated RU 201313Z Mar 01:

**SUBJECT: New Requirement - Continuous Riser Extensions for G-11 Cargo Parachutes.**

1. This memorandum is published as an **ADVANCE NOTICE TO THE FIELD** to allow ample lead time to procure sufficient stocks of Continuous Riser Extensions for G-11 Cargo Parachutes.
2. The US Army Airborne and Special Operations Test Directorate and the US Army Soldier Systems Center (Natick) have established that all G-11 cargo parachute riser extensions will be of continuous length. The requirements will be as follows:
  - Two parachute loads must have 20-foot (2-loop), type XXVI nylon slings.
  - Three and four parachute loads must have 60-foot (3-loop), type XXVI nylon slings.
  - Five through eight parachute loads must have 120-foot (2-loop), type XXVI nylon slings.
3. This new requirement becomes effective with the release of the revision to FM 10-500-2, Rigging Airdrop Platforms. The projected release date is first quarter FY 02.
4. POC for this action is CW5 Waldo, commercial (804-734-3178) or DSN 687-3178.

Memorandum dated 15 Feb 2001.

**SUBJECT: Interim Authorization to Use 3 3/4-inch, Two-Point Link Assembly in Place of Type IV Link Assembly**

1. Interim authorization is granted to use the 3 3/4-inch, two-point link assembly in place of Type IV link assembly to attach the extraction line to the 15-foot extraction parachute or drogue parachute.
2. Attach the two-point link assembly to the 15-foot extraction parachute or drogue parachute and the 60-foot (1-loop) extraction line as shown in FM 10-500-2/TO 13C7-1-5, page 3-147, Figure 3-122 using steps 1 and 2.
3. Secure the two-point link assembly to the 15-foot extraction parachute or drogue parachute as shown in FM 10-500-2/TO 13C7-1-5, page 3-150, Figure 3-123 using steps 8 and 10.
4. Recommend the two-point link assembly be considered the primary item of use and the type IV link assembly considered the substitute item.
5. This authorization has been approved by:
  - a. Mr. Moorachian, USA SBCCOM(N)
  - b. Mr. Leger, USAF, ASC
  - c. MSgt Wagner, USAF, AMC
6. POC for this action is CW5 Waldo, DSN 687-3178 or Roger Hale, DSN 687-4769.

## **HOT POOP (Continued)**

**Message dated 04/05/2001**

**SUBJECT: Securing the T-10 Modified Parachute, Corrected copy 04/05/2001**

**Please replace the original copy of this message with the corrected one as follows:**

- 1. Secure the T-10 modified parachute to a door bundle as shown on Page 3-18, Figure 3-7 of FM 10-500-3/TO 13C7-1-11/FMFM 7-47, Rigging Containers.**
- 2. This change supercedes the procedures for securing the T-10 modified parachute shown on Page 3-24, Figure 3-8 of C1, FM 10-500-3/TO 13C7-1-11/FMFM 7-47.**
- 3. This change in procedures will be included in the next change/revision to the field manual.**
- 4. Air Force Technical Order (TO) users are authorized a temporary pen and ink change in the current Technical Order until a revision or change is fielded.**
- 5. The point of contact for this action is CW5 Waldo, DSN 687-3178 or commercial (804) 734-3178.**

**Message dated Oct 00**

**SUBJECT: Corrected Copy of Message 311313Z Oct 00, Change to FM 10-500-3/TO 13C7-1-11, Change 1, dated 26 September 1996.**

- 1. Chapter 2, page 2-2, paragraph 2-2A, Paratroop Door Loads. Delete the fifth sentence completely and replace with the following three sentences:**
- 2. Loads that will be followed immediately by parachutists will be rigged with cargo parachutes having nonbreakaway static lines. Each static line must have a drogue attached to it as outlined in the technical manuals. When using the T-10 cargo parachute or 68-inch pilot parachute for the paratroop door load, the deployment bag serves as the drogue.**
- 3. The point of contact for this action is CW5 Waldo, DSN 687-3178 or commercial (804) 734-3178 or MSgt Al Wagner, DSN 687-4757 or commercial (804) 734-4757.**